land:
ā
1
ø
Sec.
w
Sep.
9
O
The
gn
Series .
N

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371

B-4496PCT 619513-8
U.S. APPLICATION NO. (If known, see 37 CFR 15

10/.07003

INTERNATIONAL APPLICATION NO.
PCT/US00/18389
TITLE OF INVENTION

FORM PTO-139

INTERNATIONAL FILING DATE 30 June 2000 PRIORITY DATE CLAIMED

26 August 1999

TITLE OF INVENTION "JEWELRY ITEM"

APPLICANT(S) FOR DOZEOJUS

(I) MEANG K. CHIA (2) CHEO K. CHIA (3) HUY K. CHIA

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. \*\*This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.

2. This is a SECOND or SUBSECUENT submission of items concerning a filing under 35 U.S.C. 371.

(XX) This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.

4. 

The US has been elected by the expiration of 19 months from the priority date (Article 31).

A copy of the International Application as filed (35 U.S.C. 371(c)(2))

a. XXX is attached hereto (required only if not communicated by the International Bureau).

kX has been communicated by the International Bureau.
 is not required, as the application was filed in the United States Receiving Office (RO/US).

6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).

a. is attached hereto.

has been previously submitted under 35 U.S.C. 154(d)(4).

7. Amendments to the claims of the International Aplication under PCT Article 19 (35 U.S.C. 371(c)(3))

. are attached hereto (required only if not communicated by the International Bureau).

b. have been communicated by the International Bureau.

c. have not been made; however, the time limit for making such amendments has NOT expired.

a. A have not been made and will not be made.

8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).

9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).

10. An English lanugage translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items II to 20 below concern document(s) or information included:

An Information Disclosure Statement under 37 CFR 1.97 and 1.98.

12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

13. A FIRST preliminary amendment.

A SECOND or SUBSEQUENT preliminary amendment.

15. A substitute specification.

A change of power of attorney and/or address letter.

17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.

A second copy of the published international application under 35 U.S.C. 154(d)(4).

19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

20. X Other items or information:

copy of International Search Report (see copy of PCT International Application) Verified Statement Claiming Small-Entity Status

16 Sheets of Formal Drawings with Cover Sheet

Copy of PCT Request Copy of PCT Demand

Copy of Form PCT/IB/304 Copy of Form PCT/IB/308

Copy of Written Opinion with copies of documents cited therein

Claim to Priority

U.S. APPLICATION NO. (STATES STATES S					ATTORNEYS DO		
NOTITY ASSISTED 1 PCT/US00/18389  21 X The following fees are submitted:			CAL		619513-8 PTO USE ONLY		
			(1) - (5)):		-		
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):  Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.485a)(22) paid to USPTO and International Search Report not prepared by the EPO or JPO							
	International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO\$890.00						
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO							
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)							
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1):(4)				s 71	10.00	T	
Surcharge of \$130.0 months from the ear	0 for furnishing the liest claimed priori	oath o	r declaration later than (37 CFR 1.492(e)).	20 30	2		
CLAIMS	NUMBER FILE	D	NUMBER EXTRA	RATE	S		
Total claims	20 - 20	=	0 *	x \$18.00		00	
Independent claims	1 -3			x \$84.00		0	
MULTIPLE DEPEN				+ \$280.00	\$ 0		
			ABOVE CALCUI		\$ 71	0.00	<b> </b>
Applicant claim are reduced by		s. See I	37 CFR 1.27. The fees i	+	\$ 35	5.00	
				BTOTAL =	<u>ٿ</u> 35	5.00	
Processing fee of \$13 months from the earl	10.00 for furnishing iest claimed priorit	g the En y date (			s		
			TOTAL NATIO		\$ 35	5.00	
Fee for recording the accompanied by an a	enclosed assignme ppropriate cover sh	nt (37 ( eet (37	CFR 1.21(h)). The assig CFR 3.28, 3.31). \$40.0	nment must be 10 per property +	\$		
			TOTAL FEES EN	CLOSED =	\$ 35	5.00	
*Preliminary Amendment deleting excess claims enclosed herewith.			Amoui	nt to be funded:	2		
					с	harged:	s
a. X A check in the amount of \$_355.00 to cover the above fees is enclosed.							
b. Please charge my Deposit Account No. in the amount of \$ to cover the above fees.  A duplicate copy of this sheet is enclosed.							
c.   The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-0415 A duplicate copy of this sheet is enclosed.							
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.							
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.							
SEND ALL CORRESPON		Febr	ruary 26, 2002			12	
		DAIL		SIGNATURI	1	. 1	- 1
LADAS & PARR	Y			John Pa	lmer		
5670 Usilahima Barilannah Caina 2100 NAME							
Los Angeles, California 90036-5679							
REGISTRATION NUMBER							
Telephone: (	323) 934-23	00 F	Facsimile: (323	934-0202			

10/070037 JC13 Rec'd PCT/PTO 26 FEB 2002

### EL652175882US

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: MEANG K. CHIA, et al.	) Re: Preliminary Amendment
U.S. Appln. No.: not yet assigned	Group: not yet assigned
U.S. Filing Date: concurrently herewith	Examiner: not yet assigned
International Application No: PCT/US00/18389 International Filing Date:	
30 June 2000	Our Ref.: B-4496PCT 619513-8
For: "JEWELRY ITEM"	Date: February 26, 2002

Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231

Attn: United States Designated/Elected Office (DO/EO/US)

Sir:

Prior to examination of the above-identified application, please enter the following amendments and remarks into the prosecution history of the above-identified U.S. patent application without prejudice or disclaimer.

### IN THE CLAIMS

Please cancel claims 21 to 130 without prejudice or disclaimer.

### REMARKS

This Preliminary Amendment cancels currently pending Claims 21-130 in order to reduce the official fees. The cancellations that are described in the preceding sentence were done to claim the scope of the invention that the Applicants elect to claim

Preliminary Amendment February 26, 2002 Page 2

. . .

and were not done to overcome the prior art, rejections under 35 U.S.C. § 112, or any other rejections or objections. Furthermore, the cancellations that are described in the first sentence of this paragraph shall not be considered necessary to overcome the prior art, rejections under 35 U.S.C. § 112, or any other rejections or objections.

The Applicants reserve the right to seek protection for any cancelled or unclaimed subject matter either subsequently in the prosecution of the present case or in a divisional or continuation application.

It is submitted that the above-identified application is in condition for allowance. Allowance of the application at an early date is solicited.

Respectfully submitted,

John Palmer Reg. No. 36,885

Attorney for Applicant

LADAS & PARRY 5670 Wilshire Boulevard #2100 Los Angeles, California 90036 (323) 934-2300

Applicant or Patentee: MEANG K. CHIA, et al. Attorney's Docket No.: B-4496PCT 619513-8
U.S. Serial or U.S. Patent No.: Not yet assigned
Filed or Issued: concurrently herewith
International Application No. <u>PCT/US00/18389</u> , filed <u>30 June 2000</u>
N TOTAL DAY TODAY

## VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9 (f) and 1.27(b)) -- INDEPENDENT INVENTOR(S)

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9 (c) for purposes of paying reduced fees under section 41 (a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled "JEWELRY ITEM" described in

[VV]	the	specification	filed	herewith.

- [ ] application serial no.: \_\_\_\_\_, filed \_\_\_
- [XX] International Application No. PCT/US00/18389, filed 30 June 2000.
- I have not assigned, granted, conveyed or licensed and am under no obligation under contact or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9 (c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9 (e).

Each person, concern or organization to which I have assigned, granted, conveyed or licensed or am under an obligation under contract or law to assign, grant, convey or license any rights in the invention is listed below:

- [ ] no such person, concern, or organization
- persons, concerns or organizations listed below\*

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME \_ ADDRESS [ ] INDIVIDUAL [ ] SMALL BUSINESS CONCERN [ ] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

MEANG K. CHIA

Name of First Inventor

CHEO K. CHIA

Name of Second Inventor

HUY K. CHIA Name of Third Inventor Signature of Se

02/22/02 Date FEB/22/02 Date © 02/22/03

Signature of Third Inventor

### JEWELRY ITEM

This is a continuation-in-part application of: (1) U.S. Patent Application No. 09/383,814 (filed 26 August 1999); (2) U.S. Patent Application No. 09/224,936 (filed 31 December 1998); (3) U.S. Design Patent Application No. 29/120,104 (filed 10 March 2000); (4) U.S. Design Patent Application No. 29/116,859 (filed 11 January 2000); and (5) U.S. Design Patent Application No. 29/110,327 (filed 3 September 1999). All of the applications mentioned in the preceding sentence are

### BACKGROUND OF THE INVENTION

### Field of the Invention

This invention relates to items of jewelry, and in particular to a modular simulated gem and gem setting jewelry arrangement.

### Brief Description of the Art

Unitary jewelry items and/or modular links for forming jewelry bracelets, necklaces, pendants, and rings are well known. The so-called tennis bracelet, for example, is a bracelet having a series of connected modular units, each unit comprising an actual diamond or other gem and a setting therefor.

Reference is made to the following U.S. patents:

	<b></b>	
	Patent No.	Inventor(s)
	Des. 110,568	L. Garfinkel
25	1,189,497	A. Schwartzman
	1,589,423	H. Payton
	1,344,365	H. Wachenheimer
	2,538,090	H. Ferragamo
	4,781,038	Branca et al.
30	Des. 146,779	M. Slater
	Des. 117,577	J. Sand
	Des. 257,017	J. Barr
	Des. 156,650	W.W. Pearce et al.
	4,763,489	L. Strong

	Des. 48,950	C. Rosenberger
	1,410,366	E.H. Buchman
	Des. 131,847	W.W. Hobe
	1,153,362	J.C. Wacha
5	Des. 42,643	H.H. Meyers
	Des. 176,664	Adolph Katz
	Des. 143,588	O. Green
	Des. 265,639	Josef J. Barr
	Des. 84,213	A.E.R. Speidel
10	Des. 56,605	H. Grasmuk
	Des. 151,904	A. Katz
	Des. 145,426	J. Braunstein
	Des. 144,901	J. Braunstein
	Des. 160,241	P. Bardach

15 Reference is also made to prior U.S. patent applications of the inventor of the present invention as follows: Patent Application No. 07/572,678, filed August 23, 1990 for "BRACELET DESIGN", which is a continuation application of Design Application Serial No. 397,094 filed August 22, 1989 entitled "BRACELET OR THE LIKE"; and Patent Application No. 09/224,936 filed December 31, 1998 entitled "DECORATIVE JEWELRY ITEM". All of the applications mentioned in this paragraph are incorporated herein by this reference.

Non-patent references of interest may include:

- 25 1. "Charms" catalog, Page 136, Item #136-20, by Americas GOLD, 650 South Hill St., Los Angeles, CA 90014'
  - "Liberty Collections" catalog, Pages 4 and 21, by Liberty
     Exchange, 333 Washington St. #203-1, Boston, MA 02108;
- "Diamond Flower" jewelry by S&R Designs, Inc., Marlton,
   NJ;
  - Items #P10529, #84619, #84622, National Jeweler, May 16, 1997;
  - Janet Alix necklace, Jewelers Circular Keystone, May, 1997;

20

25

- Catalog Item #4D, Skalet Gold, 3600 N. Talman Ave., Chicago, IL 60618;
- Caroline Ballou Collection, June Las Vegas Show, K25-K27, and Barnett Robinson, Inc. June Las Vegas Show, Galleria #10:
- Item N362, P.Q.C. Jewelry, National Jeweler, June 1, 1998, Page 142;
- 9. "Love Tears" collection, by Studs, Inc., 42 W. 48 St., New York. NY 10036;
- 10. Slide pendant, by Superior Diamond Cutters Inc., 589 Fifth Ave., New York, NY 10017;
  - 11. Uni-Creation, Inc., Emby International, Inc. collection, 589 Fifth Avenue, New York, NY 10017;
  - 12. A Promotional Supplement To JCK, May 1997, Pages 178, 179;
- 15 13. Item SS424, Corona Jewellery Company, 16 Ripley Ave., Toronto, Ontario, M6S 3N9, Canada;
  - 14. "Bezel-set jewelry, California Gold Center, 606 S. Hill St., Los Angeles, CA 90014;
  - "Partners" fashion jewelry, Cache fashion watches, Mervyn's California catalog flyer, 1998, Page 11;
  - 16. California Precision Products Co. Catalog "Laser Spot-Welding Systems", One Industrial Court, Riverside, Rhode Island 02915:
  - 17. Maty, Collection Automne Hiver 97-98, Valeur 30F, No. -76.

The jewelry items shown and described in the art noted above take on various aesthetically pleasing forms for displaying gems, real or simulated, in a variety of visual and structural configurations.

30 Channel settings and bezel settings that use real gems increase the price of a jewelry item dramatically.

In all such items of the prior art in which a gem or simulated qem is mounted in a gem setting, the gem or simulated gem is positioned brought down from above the setting and secured in place. In assembling the gem and gem setting combination, typically a series of upwardly directed prongs project from the setting, also referred to as a "base", and the gemstone, or simulated gemstone, is lowered to fit within the upwardly extending prongs, after which the series of prongs are bent inwardly and downwardly to embrace the gem or simulated gem. While this configuration displays the gem in the foreground relative to the setting, there are many disadvantages to such

In particular, with the prongs of the setting exposed, it is relatively easy to snag clothing or inflict minor injuries to the skin of a person by an inadvertent scraping action.

Moreover, the prongs of the setting base are unsightly,

detracting from the aesthetic qualities of the item of jewelry.

If one were to conceive of the idea of avoiding the unsightliness of upwardly extending gem mounting prongs, the idea would be quickly rejected, due to the fact that if a precious stone, for example a diamond or ruby, is mounted below the upper surface of the setting base, the pointed bottom of the stone would penetrate the skin of the user even more so than is commonly done even with stones mounted from the top of a setting base or bezel. The pointed bottom of a precious stone is, by design, formed with specific depth and angles to capture as much light as possible for reflection through the stone, thereby enhancing the brilliance and spectacle of the gem.

Yet another disadvantage of the use of prior art unitary

30 modules for connection in series to form a tennis bracelet,
for example, is that such bracelet construction is rather
labor intensive, each modular unit having to be connected to
an adjacent unit, and for a bracelet with, typically thirty or

more, individual modules, the cost of the bracelet to the ultimate consumer may be inflated beyond expectation of the purchaser who values the item of jewelry on the basis of its precious stone content. Typical prong, channel, and bezel settings not only use expensive gems that sometimes get damaged during the setting procedure, but these types of settings themselves are costly. The purchaser would be greatly benefitted by a less costly manufacturing process, since, for the same purchase price, the purchaser would receive more or larger stones, simulated or real. Such simulated or real stones of a greater quality. There is therefore a need in the art for reducing the manufacturing costs of multi-modular jewelry items.

One solution to avoid employing upwardly extending gem

15 mounting prongs is found in the aforementioned U.S. Patent
Application No. 09/224,936 in which a gem or simulated gem is
inserted from below into a hollow base member having a top
bezel with and opening therein to expose the gem or simulated
gem below.

### SUMMARY OF THE INVENTION

The present invention satisfies the needs and desires of the purchasing public while simultaneously solving the aforementioned problems associated with jewelry items in which the gem is mounted above the setting using upwardly protruding prongs. The invention thus solves the same problems as does the aforementioned '936 patent application, but in a different way, while offering certain additional features not found in the '936 application.

In accordance with one aspect of the present invention, there
30 is provided a decorative jewelry item, comprising: a hollow
base member having a decorative top; a cap with an opening
therein; and a cap attachment arrangement for attaching the

WO 01/13754 PCT/US00/18389

6

cap to the hollow base member with at least a portion of the decorative top being viewable through the cap opening.

The decorative top may be integral with the base member, or it may be defined by a top surface on the base member with a separate decorative object fixed to such top surface.

In accordance with another aspect of the present invention, there is provided a decorative jewelry item, comprising: a base member having a hollow interior, a top with an opening therein leading to the hollow interior, a bottom, and a sidewall extending from the top to the bottom, the sidewall having an opening therein leading to the hollow interior; a decorative insert configured and sized in relation to the base member to be inserted within the hollow interior through the sidewall opening and viewable through the top opening; and a retainer for retaining said decorative insert within said base member hollow interior.

In one preferred embodiment of the invention, the base member is segmented, defining a plurality of base member segments each having a decorative top, fixedly connected together side-by-side. Similarly, the cap is segmented, defining a like plurality of cap segments each having an opening therein, fixedly connected together side-by-side; and the cap attachment means is adapted to attach the segmented cap to the segmented base member with at least a portion of each decorative top being viewable through the cap openings.

In another aspect of the invention, there is provided a decorative jewelry item, comprising: a base member having a hollow interior, a top with an opening therein leading to the hollow interior, a bottom, and a sidewall extending from the top to the bottom; and a decorative insert configured and sized in relation to the base member top opening to be inserted, through the top opening, into the hollow interior

and positioned below the top; the decorative insert being fixed within the base member hollow interior with the decorative insert viewable through the top opening.

The invention embodies both the construction or constructions
of a decorative jewelry item as well as the method or methods
for making a decorative jewelry item.

It will be appreciated that, in accordance with the principles and concepts of the present invention, since the decorative object, decorative insert, or simulated decorative object or insert, is typically positioned below the top of the decorative jewelry item and above the bottom of the base member, snagging of clothing, and penetration of the user's skin is avoided. Unlike real gems, the simulated gem of the present invention does not extend below the bottom of the base member in which it is contained.

In another aspect of the invention, there is provided a plurality of such decorative jewelry items joined together. For example, a pair of such decorative jewelry items may be joined together in the manufacturing process so that the number of individual modular units to be assembled, to form a tennis bracelet for example, is halved.

The present invention also provides for a number of selectable structural configurations and mounting processes, depending on need, desired security for a mounted gem or simulated gem, and aesthetic considerations.

In the most preferred embodiments of the invention, the decorative insert or object is mounted within its single or multiple segmented base member with no part of the insert extending above the top rim, or bezel, of the base member.

30 However, it will be understood that even if the decorative insert or object protrudes a small distance above the top rim,

N

WO 01/13754 PCT/US00/18389

or bezel, clothing will not be snagged, and the slightly exposed top surface of the insert or object above the top rim, or bezel, will not be sufficient to scratch objects or the user's skin. If desired, in the manufacture of the decorative insert or object, a process step may be applied to round over, bevel, or otherwise soften the peripheral edges of the insert or object to assist in minimizing snagging of clothing or scratching objects or the user's skin. Accordingly, a secondary preferred embodiment of the invention will have the top surface of the decorative insert or object at the same level of, or slightly above, the top rim, or bezel, of the base member.

### BRIEF DESCRIPTION OF THE DRAWING

These and other aspects of the invention will be better

15 understood, and additional features of the invention will be described hereinafter having reference to the accompanying drawings in which:

FIGURE 1 is a front perspective view of a dual segment base member having an integral decorative top;

20 FIGURE 2 is a rear perspective view of the base member shown in Figure 1;

FIGURE 3 is a side perspective view of the base member shown in Figure 1;

FIGURE 4 is a bottom perspective view of a dual segment cap 25 for the base member shown in Figure 1;

FIGURE 5 is a front perspective view of the dual segment cap;

FIGURE 6 is a side perspective view of the dual segment cap;

WO 01/13754 PCT/US00/18389

9

FIGURE 7 is a side perspective view illustrating the method of placing a dual segment cap over the top of a dual segment base member:

FIGURE 8 is a view similar to that of Figure 7, but with the 5 cap fully assembled to the base member, defining a finished decorative jewelry item:

FIGURE 9 is a front perspective view of the assembled jewelry item shown in Figure 8;

FIGURE 10 is a front perspective view of a dual segment base

10 member in which the decorative top of each segment exhibits a

different visual appearance or property;

FIGURE 11 is a side perspective view of the dual segment base as shown in Figure 10;

FIGURE 12 is a front perspective view of a dual segment cap
15 illustrating that a cap member may have any one of a variety
of possible shapes for the openings therein and for the
texturing and design of the major top surface of the cap;

FIGURE 13 is a side perspective view of a dual segment cap showing a variety of possible sidewall texturing or designs;

20 FIGURE 14 is a bottom view of an alternate dual segment cap configuration without mounting prongs;

FIGURE 15 is a fully assembled dual segment decorative jewelry item employing a base member similar to that shown in Figure 11, and a cap structure similar to that shown in Figure 14;

25 FIGURE 16 is a front perspective view of a dual segment base member having a decorative top, the base member decorative top including a base member top surface and a separate decorative WO 01/13754 PCT/US00/18389

10

object fixed thereon and a number of mounting channels on the sides of the base member;

FIGURE 17 is a rear perspective view of the base member shown in Figure 16;

5 FIGURE 18 is a side perspective view of the base member shown in Figure 16;

FIGURE 19 is a bottom perspective view of a dual segment cap for the base member shown in Figure 16;

FIGURE 20 is a front perspective view of the dual segment cap;

10 FIGURE 21 is a side perspective view of the dual segment cap;

FIGURE 22 is a side perspective view illustrating the method of placing of a dual segment cap over the top of a dual segment base member;

FIGURE 23 is a view similar to that of Figure 22, but with the 15 cap fully assembled to the base member, defining a finished decorative jewelry item;

FIGURE 24 is a front perspective view of the assembled jewelry item shown in Figure 23;

FIGURE 25 is a view similar to that of Figure 16 with circular 20 through holes in the top surface of the dual segment base member replacing the channels shown in Figure 16;

FIGURE 26 is a view similar to that of Figure 25 with the exception that each separate decorative object placed on the top surface of the dual segment base member has a greater thickness than that shown in Figure 25;

FIGURE 27 is a dual segment completed decorative jewelry item employing the thickened decorative object shown in Figure 26 which protrudes through the cap of the assembly:

FIGURE 28 is a dual segment cap illustrating the possibility
5 of a non-planar top surface of the cap and the possibility of
at least partially covering the opening in the cap with a
filagree-like structural design;

FIGURE 28A is an enlarged cross section of one side of the cap segment taken along the line 28A-28A in Figure 28;

10 FIGURE 29 is a dual segment finished decorative jewelry item in which the base member segments and the cap segments are heart shaped, and the top surface of the cap segments are concave;

FIGURE 30 is a view similar to that shown in Figure 25, but

15 with the fixed decorative objects mounted on the top surface
of the base member being of different shapes and designs for
the two segments;

FIGURE 31 is a front perspective view of a dual segment base member having a recess formed concentrically in each of the 20 segments;

FIGURE 32 is a cross sectional view of one of the segments of the base member shown in Figure 31, taken along the line 32-32, with a separate decorative object captured loosely in the recess of the base member and between the base member and 25 applied cap;

FIGURE 33 is a view similar to that of Figure 32, but without and opening in the bottom of the recess in the base member;

O

WO 01/13754 PCT/US00/18389

12

FIGURE 34 is a top view of a dual segment cap illustrating different shape and size possibilities for the cap segments, and in particular a wavy inner edge and a thin annular configuration;

- 5 FIGURE 35 is a top view of a dual segment cap illustrating different shape and size possibilities for the cap segments, and in particular a scalloped interior edge and a fillagree pattern structure;
- FIGURE 36 is a top view of a dual segment cap illustrating
  10 different shape and size possibilities for the cap segments,
  and in particular a cloverleaf-like interior edge and star
  shaped fillagree pattern structure;
- FIGURE 37 is a top view of a dual segment cap illustrating different shape and size possibilities for the cap segments, and in particular a square interior edge and a heart shaped interior edge;
  - FIGURE 38 is a front perspective view of a dual segment base member having rectangular openings in its top surface as opposed to the circular openings shown in Figure 25;
- 20 FIGURE 39 is a front perspective view of a dual segment cap in which the outside edge is serrated, and the cap has a thin annular radius for each segment;
  - FIGURE 40 is a side perspective view of the dual segment cap shown in Figure 39;
- 25 FIGURE 41 is a side perspective view of an assembled decorative jewelry item employing the base member from Figure 38 and the cap from Figure 39;

M

WO 01/13754 PCT/US00/18389

13

FIGURE 42 is a front perspective view of the assembled decorative jewelry item shown in Figure 41;

FIGURE 43 is a view similar to that of Figure 42 showing possible major surface texturing or designs for the portion of the top surface of the base member extending radially outwardly of the annular cap segments surrounding the decorative objects fixed to the top surface of the base member segments;

FIGURE 44 is view similar to that shown in Figure 39, except

10 that the outer surface of the cap is plain and smooth, and the
inner edge surfaces are serrated;

FIGURE 45 is a front perspective view of a finished decorative jewelry item employing the base member from Figure 38 and the cap from Figure 44;

15 FIGURE 46 is a front elevation view of a multi-stepped cap, with each exterior edge serrated, mounted on a base member having a textured top surface;

FIGURE 47 is a single non-segmented decorative jewelry item having features similar to the dual decorative jewelry item 20 shown in Figure 23;

FIGURE 48 is a front perspective view of the single decorative jewelry item shown in Figure 47;

FIGURE 49 illustrates the possibility of constructing a single non-segmented decorative jewelry item without employing prongs on the cap and without providing windows in the sidewalls of the base member:

FIGURE 50 is a front elevational view of the single decorative jewelry item shown in Figure 49;

FIGURE 51 is a side perspective view of a single non-segmented decorative jewelry item similar to that shown in Figure 49, but with lettering and/or designs being formed on the sidewall of the base member;

- 5 FIGURE 52 is a side perspective view of a single non-segmented decorative jewelry item similar to that shown in Figure 49, but with designed openings in the sidewall of the base member and without any means for attaching to another decorative jewelry item;
- 10 FIGURE 53 is a side perspective view of the single nonsegmented decorative jewelry item as shown in Figure 49, except that at least a portion of the sidewall exhibits a line pattern;
- FIGURE 54 is a front perspective view of a single non15 segmented decorative jewelry item similar to that shown in
  Figure 48, except that the base member and cap are heart
  shaped, and the cap top surface is concave;
- FIGURE 55 shows a length of a piece of jewelry, such as a bracelet, having a center structural portion with a number of cylindrical pockets which can receive single non-segmented decorative jewelry items made in accordance with the present invention, such as those shown in Figures 48, 50, and 52;
- FIGURE 56 shows a length of a piece of jewelry, such as a necklace, having a center structural portion with a number of cylindrical pockets which can receive single non-segmented decorative jewelry items made in accordance with the present invention, such as those shown in Figures 48, 50, and 52;

FIGURE 57 is a front perspective view of a finger ring having a heart shaped pocket formed therein for receiving a single

non-segmented decorative jewelry item made in accordance with the present invention, such as that shown in Figure 54;

FIGURE 58 shows a length of a piece of jewelry, such as a pendant, having a structural portion with a number of 5 cylindrical pockets which can receive single non-segmented decorative jewelry items made in accordance with the present invention, such as those shown in Figures 48, 50, and 52;

FIGURE 59 shows a length of a piece of jewelry, such as an earring, having multiple pockets for receiving differently configured decorative jewelry items in each pocket in accordance with the present invention, such as geometrically altered ones of those shown in Figures 48, 50, and 52;

FIGURE 60 is a front perspective view of a dual segment base member, each segment having a sidewall with an opening therein;

FIGURE 61 is a side perspective view of the base member shown in Figure 60:

FIGURE 62 is a front perspective view of a decorative object to be inserted in the base member of Figures 60, 61;

20 FIGURE 63 is a view similar to that of Figure 60, with a pair of decorative objects shown in Figure 62 being inserted into the sidewall openings in the base member;

FIGURE 64 is a fully assembled dual segment decorative jewelry item comprised of the base member shown in Figure 60 and a 25 pair of decorative objects shown in Figure 62;

FIGURE 65 is a cross sectional view of a variation of the present invention in which the decorative object is a real precious stone, or gem;

FIGURE 66 is a top view of just the base member of the variation shown in Figure 65, with the cap removed and with the precious stone, or gem, schematically represented by a dashed line;

5 FIGURE 67 is a partial cross sectional view of a first type of teetering mechanism between a decorative object and the top surface of a base member;

FIGURE 68 is a partial cross sectional view of a second type of teetering mechanism between a decorative object and the top surface of a base member;

FIGURE 69 is a partial cross sectional view of a third type of teetering mechanism between a decorative object and the top surface of a base member;

FIGURE 70 is a cross sectional view of a base member with a rotatable decorative object pivotally mounted at the top of the base member between the base member and the cap;

FIGURE 71 is a top view of just the base member of the variation shown in Figure 70, with the cap removed;

FIGURE 72 is a front perspective view of another single
20 segment base member having a sidewall with an opening therein
and a support for a decorative insert;

FIGURE 73 is a side perspective view of the base member shown in Figure 72;

FIGURE 74 is a front perspective view of a decorative object
25 adapted to be inserted in the base members of Figures 72, 73,
76, 81, 82, and 83;

FIGURE 75 is a side perspective view of the decorative object shown in Figure 74;

FIGURE 76 is a front perspective view of another single segment base member having a sidewall with dual openings therein and a plate-like support for a decorative insert;

FIGURE 77 is a front perspective view of another single segment base member having a sidewall with dual openings therein and a modified plate-like support for a decorative insert;

10 FIGURE 78 is a view similar to that of Figure 73, with a decorative object as shown in Figure 75 being inserted through the top opening of the base member;

FIGURES 79 and 80 are side and front perspective views, respectively, of a fully assembled single segment decorative jewelry item comprised of the base member as shown in Figures 72 and 73 and the decorative object as shown in Figure 74 and 75;

FIGURE 81 is a front perspective view of another dual segment base\_member having a sidewall with openings therein and a pair 20 of supports for two decorative inserts;

FIGURE 82 is a side perspective view of the base member shown in Figure 81;

FIGURE 83 is a front perspective view of another dual segment base member having a sidewall with dual openings therein and a pair of plate-like supports for a decorative insert, the figure illustrating three different support configuration possibilities;

M

WO 01/13754 PCT/US00/18389

18

FIGURE 84 is a view similar to that of Figure 82, with a pair of decorative objects as shown in Figures 75 being inserted through the top openings of the dual base member;

FIGURES 85 and 86 are side and front perspective views,
5 respectively, of a fully assembled dual segment decorative
jewelry item comprised of the base member as shown in Figures
81 and 82 and the decorative object shown in Figure 74 and 75;

FIGURES 87 and 88 are top and side perspective views, respectively, of a multiple decorative insert; and

10 FIGURE 89 is a front perspective view of a multiple segmented base member adapted to receive the multiple decorative insert of Figures 87 and 86.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A first embodiment of the invention is shown in Figures 1-9.

Figures 1-3 represent the front, rear, and side perspective views of the base member 2. In this embodiment, each decorative jewelry item 1 (Figure 8), hereinafter also referred to as a module or modular link, is segmented to define two segments 3 and 5 in a substantially figure-8 shape.

The dual segmented base member 1 has a segmented decorative top 7, 9, exhibiting a design representing a diamond cut surface on each segment. In the embodiment of Figures 1-9, the diamond cut design is formed integrally on the top surface of the base member 2. As will be described below, an

alternate embodiment may employ a separate decorative object fixed to the top surface of the base member 2.

The base member 2 preferably has a hollow interior defined by a thin sidewall 6 extending downwardly from the decorative top 7, 9, the sidewall 6 having at least one cutout 13 extending through sidewall 6 into the interior of the base member 2.

The cutout 13 is provided to accept a prong from a cap member to be described hereinafter.

To enhance the beauty of the decorative jewelry item, to lighten it, to conserve precious metal, and to make it have more of a delicate appearance, the sidewall 6 may be provided with a series of side windows 11 also opening to the interior of the hollow base member 2. The windows 11 provide a convenient placement for the cutouts 13, i.e. at the top of the window just beneath the decorative top 7, 9 of base member 0 2. It will be appreciated that a prong from above can be bent into window 11 and fill cutout 13 if the prong is bent over toward the interior of the base member 2.

A connector tongue 15 is provided at the rear of the decorative jewelry item for insertion into a front window 17 of an adjacent decorative jewelry item.

Figures 4-6 show a bottom, front, and side perspective view of a dual segment cap 19 designed and configured to fit over the top of the dual segment base member 2 and secured thereto.

As best understood by reference to Figures 4, 7, and 8, the

20 inner diameter of each sidewall 27 of the segmented cap 19 has
a diameter slightly greater than the respective decorative
tops 7, 9 of the base member 2. Thus, when the cap 19 is
brought down over the top of the base member 2 (see Figure 7),
the prongs 21 slide over the side of sidewall 3,5 in alignment

25 with cutouts 13, and the cap 19 ultimately fits over the top
of base member 2 with the downwardly directed peripheral wall
27 covering a relatively small top portion of the base member
sidewall 3, 5. After the cap 19 is in place, the prongs 21
are bent inwardly through the sidewall windows 11, and due to
30 the width and depth of the cutout 13 being slightly larger
than the width and thickness of the prongs 21, after prongs 21
are bent inwardly, they are not visible from a side viewing

position of the completely assembled decorative jewelry item 1 (see Figure 8).

As seen in Figure 9, the finished decorative jewelry item is an attractive dual segmented modular link which can, when 5 connected to other modular links of the same kind, form a tennis bracelet with the decorative diamond cut surfaces 7, 9 being seen through the openings 23, 25 of the cap 19.

Preferably, the embodiment of the invention shown in Figures 1-9 is provided with four windows 11 on each side of the 10 decorative jewelry item, or two per segment side (see Figure 3), with the two windows nearest the ends having a cutout 13 on the surface forming the windows 11. Since the decorative jewelry item is symmetrical, the embodiment of Figures 1-9 embodies a total of eight windows and four cutouts.

15 Similarly, as seen in Figure 4, the cap 19 comprises four prongs 21, but the number of prongs 21 and window cutouts 13 can range from one to eight, or even more.

Figure 10 is a front perspective view of a base member 31 in which, like the base member 2 of Figure 1, is provided with an 20 integral decorative top 33, 35 on two base member segments. The diamond cut surface of decorative top segment 35 is similar to that shown in Figure 1, but with a larger number of radial cuts. However, the other decorative top 33 shows a lesser number of radial diamond cuts in the surface thereof, 25 but such diamond cuts are formed after the decorative top segment 33 is provided with a number of holes 37. The holes can be arranged orderly, or, as seen in Figure 10, they can be

of random sizes, random shapes, and random positions on the

30 Figure 11 is a side perspective view of the base member 31 showing that no side windows are provided in the sidewall 39.

decorative top 33.

WO 01/13754 PCT/US00/18389

21

A front end window 41 is formed at the opposite end from the connector tab 15 for accommodating the connector tab of an adjacent modular link when the finished decorative jewelry item is in the form of a tennis bracelet, for example. In such an arrangement, the connector tab 15 is inserted in an adjacent end window 41 and then bent around the bottom ledge of window 41.

Figure 12 is the top view of a variation of the cap shown in Figure 5, with no depending prongs. In Figure 12, one-half of the cap 43 has a circular opening therein, while the other half has a heart shaped opening. The top surface 42 of the segment with a heart shaped opening is plain, while the segment with a circular opening contains multiple design patterns and textures on its top surface 44, it being 15 understood that the designs and textures shown are examples only of what can be done to the surfaces. Preferably, there will not be multiple patterns on any surface of the cap, i.e. if the surface is to be textured, for example, then the whole top surface will be of the same texture.

20 Figure 13 is a side perspective view of a dual segment cap similar to that shown in Figure 6, again without any mounting prongs. The side surfaces 45 of the cap 43 show multiple designs and texturing, and again if the side surface is to be textured, the entire side will be of the same texture.

25 However, the design or texture on the side 45 of cap 43 does not necessarily have to correspond to the design or texture of the top surface.

Figure 14 shows the bottom view of the cap shown in Figure 13, but without showing any design or texturing. Since there are 30 no prongs, the sidewall 45 of cap 43 has an inner diameter slightly greater than the diameter of the segments of the base member 31, allowing the cap 43 to cover the top portion of the base a short distance.

Ö

M

WO 01/13754 PCT/US00/18389

22

Figure 15 shows the finished assembly of Figure 11 and Figure 13 with optional identical diamond cut decorative tops on the two segments of the base member 31 viewable through identical circular openings in the cap 43 which is devoid, in Figure 15, of any design or texturing. Since there are no prongs or cutouts in the Figure 15 assembly, the cap 43 is fixed to the base member 31 by means of soldering, welding, adhesive, or other known adhering processes.

Figures 16-24 are very similar to Figures 1-9, respectively,

10 with some notable differences. One difference is that, in the
embodiment of Figures 1-9, the top of the base member 2 has
diamond cut patterns formed thereon, while in Figures 16-24,
the decorative top of the base member 51 comprises a planar
top surface 53, 57 upon which is fixed two separate, and

15 individual, decorative objects, 55, 59. This is best viewed
in Figures 17 and 18.

A second difference to be noted is that a number of vertical channels 61 are provided around the periphery of the base member 51, channels 61 extending through the top surface 53, 20 57 of the base member 51 downwardly to corresponding open windows 56 in the sidewalls of the base member segments 52, 54...The windows 56 correspond in number and placement the same as windows 11 of the embodiment of Figures 1-9. Preferably, the channels 61 are provided in alignment with the outermost windows, i.e. the sidewall windows 56 closest to the short ends of the dual segment decorative jewelry item.

The purpose for the channels 61 can be appreciated by referring to the associated cap 71 shown in Figures 19-21, in which a plurality of rectangular prongs 77 extend from the 30 lower surface of the cap 71 and are not visible in a top view due to such placement. The cap 71 has a pair of openings 73, 75 through which the decorative objects 55, 59 can be observed when the decorative jewelry item is completely assembled. As

seen in Figure 19, a recess 79, 81 is provided in each segment of the dual segment cap 71, the diameter of the decorative objects 55, 59 being larger than the diameter of the cap openings 73, 75, but smaller than the diameter of the recesses 79, 81. Unlike the cap 19 shown in Figures 4-6, the cap 71 is the same length and width as the base 51. In Figure 19, the cap 71 is shown to have a flat bottom surface 78, and the recess 79 is not as noticeable compared to the recess 24 of cap 19, recess 79 intending to cover only the diamond cut 0 decorative objects 55, 59 projecting into the cap recesses 79.81.

Thus, when the cap 71 is brought down over the top of base member 51, since both cap 71 and base member 51 have the same length and width, prongs 77 fit perfectly into and slide

15 through channels 61 until the cap 71 is seated on the base member 51 with the bottom of the cap resting on the top surface 53, 57 of the base member 51, and the decorative objects 55, 59 being framed by the openings 73, 75 in the cap 71.

20 The two decorative objects 55, 59 are described separately in this description to indicate that the design and shape of such decorative objects 55, 59 need not necessarily be identical as they-appear to be in Figures 16-24.

After contact between the cap 71 and base member 51, the
25 prongs 77 are bent inwardly through the respective windows 56,
and, because the thickness of the prongs 77 is made to be the
same as the depth of channels 61, after the prongs 77 are bent
over, as shown in Figure 23, the prong/channel attachment
arrangement is barely visible.

A third difference is seen in the provision of a number of through holes 62 formed in the surface of the base member top surfaces 53 and 57 outside the periphery of the decorative WO 01/13754 PCT/US00/18389

24

objects 55 and 59 (shown in Figure 16 only, for convenience). The purpose of these through holes 62 is to reduce the amount of precious metal or material of the base member 52.54. placing the holes 62 in a pattern such as that shown in Figure 5 16, a significant amount of base material, e.g. gold, will be saved, and yet the physical integrity of the finished decorative jewelry item will not be diminished. Because the holes 62 are covered and hidden from view by the cap 71, they will not detract from the beauty of the item. Additionally, 10 such through holes 62 in the base member 52,54 will also lighten the article of jewelry, e.g. a tennis bracelet, which comprises a number of decorative jewelry items 51. This would be a desirable feature especially for women. Through holes of this type for reducing the amount of precious metal or 15 material can be formed in virtually all of the decorative jewelry item base members shown and described herein, and the variation shown in Figure 16 is to be considered exemplary only.

Figure 24 is a front perspective view of the completely
20 assembled decorative jewelry item employing the base 51 and
cap 71, as described.

Figures 25-27 show another attachment arrangement for attaching a cap to a base member. In these figures, the base member 81 has a planar top surface on the two segments 83, 87 upon which are fixed a pair of decorative objects 85, 89. In the top surface 83, 87 of the base member 81, a number of circular holes 88 are formed, and a cap 95, similar to that shown in Figure 19 is provided, but with the depending prongs being circular in cross section and positioned on the bottom surface of the cap 95 away from the outer peripheral edge and to be in alignment with holes 88 of the base member 81. Thus, when the cap 95 is brought down over the top of base member 81, the prongs will slide through holes 88 and be bent over (not shown) in the interior of the hollow base member 81. The

number of holes 88, and the number of prongs, can vary from one to eleven, or even more.

The base member of Figure 26 is similar to that shown in Figure 25, except that the thickness of the two decorative objects 85, 89 are considerably thicker. A cap 95 is chosen to have a central opening just slightly larger than the diameter of the thickened decorative objects 91, 93, such that when the cap is brought down over the base member 81, the thickened decorative objects 91, 93 project through and extend above the top surface of the cap 95, as best seen in Figure 27 showing the completed article.

Figure 28 shows a variation of a cap 101 having a pair of annular shaped segments 101A,101B with the top surface 103 of each cap segment being conical/concave in shape to enhance the beauty of the finished product. Figure 28 also shows the possibility of adding an open filagree-like design structure 105 to the inner periphery of the opening 104 and/or an open filagree-like design structure 106 to the outer periphery of the cap segments 101A, 101B.

- 20 Figure 28A is a cross section of one side of the cap segment 101A taken along the line 28A-28A in Figure 28. This figure illustrates, in solid and dashed lines, several possibilities for the shape of the top surface 103, i.e., a planar and horizontal shape 103A, a convex shape 103B, a concave shape
- 25 103C, a linear conical shape 103D, a conical-concave shape 103E, and a conical-convex shape 103F. These shape variations can be chosen by the designer for cap configurations other than annular; for example, such shapes can be applied to a heart shaped cap segment such as those shown in Figure 29.
- 30 Figure 29 shows a finished decorative jewelry item in which both segments of the base 107 are heart shaped and both segments of the cap 108 are heart shaped and, like that of

Figure 28, the cap 108 has a concave peripheral upper surface 109 and a heart shaped opening 110 to expose the decorative objects 111, 113 beneath.

Figure 30 illustrates the possibility that the decorative

5 objects 117, 119 fixed to the base member 115 may be of any
particular desirable configuration and formed by any means of
diamond cutting or other surface enhancing processes. In
Figure 30, the top decorative object 117 is square in
configuration with crisscross diamond cut features, and the
10 lower decorative object 119 is heart shaped with a square
matrix of diamond cut lines.

It will be understood that the geometric shape of the opening in any cap in accordance with the present invention need not be the same geometric shape as the decorative object below.

15 For example, instead of using a heart shaped decorative object 119 in Figure 30, a square or circular shaped decorative object could be fixed to the base member 115, and the opening in a cap (not shown) fitted over base member 115 may be heart shaped.

- 20 Figures 31-33 show embodiments of the invention into which a decorative object 121 is loosely captured or entrapped between a base member 123 and a cap 129. The base member shown in Figure 31, for example, has a planar upper surface 125 and a pair of concave, or right angled, recesses 127. The bottom of the recess 127 may have an opening 129 in it to conserve
- precious metal material, since that part of the finished jewelry item will not be seen.

Figure 32 is a cross sectional view taken along the line 32-32 in Figure 31, wherein it can be seen that when the cap 129 is 30 brought into contact with the planar surface 125 of the base member 123, there exists a void within the decorative jewelry item within which the decorative object 121 is loosely

out of its setting.

WO 01/13754 PCT/US00/18389

27

contained. This permits the decorative object 121 to move around within the confines of the finished decorative jewelry item, giving an interesting aspect to the item of jewelry.

In addition to, or instead of, providing a recess 127 in the

5 base member 123, the cap 129 may be provided with a recess 131

of sufficient depth to permit the loose mounting of the
decorative object 121 captured between the cap 129 and the
base 123. For example, a cap designed similar to that shown
in Figure 19, but with a greater depth for the recess 131

10 could be employed for this purpose. Importantly, the opening
129 in the base member 123 and the opening 133 in the cap 129
are smaller in dimension than the decorative object 121 so as
to avoid the possibility of the decorative object 121 falling

15 Figure 33 is similar to that of Figure 32 with the exception that the bottom 135 of the recess 127 of base member 123 has no opening.

Figures 34-37 show, schematically, several possible shapes and configurations for the cap openings. The outer shapes for the 20 caps in these figures is, but is not limited to, a figure-8 shape. The cap 141 of Figure 34 shows a cap segment having an undulated or wavy interior edge, while the annular cap segment 145 is intended to show that the radial width of the cap segment can be made quite thin, whereby a decorative object may be exposed through the opening therein, while the surface of a base member upon which it is mounted may also be exposed to view and display interesting surface textures or designs (see Figure 43, for an example).

When the outer diameter of the bottom cap segment 145 is,

30 instead, made equal to the outer diameter of the base member
segment, the thinness of the cap segment 145 will display the

decorative top of the base member larger than a regular sized cap opening.

Figure 35 shows a cap 147 with one segment 149 having a scalloped interior edge 146 and/or a scalloped exterior edge 5 148 (shown as an option in dashed lines), and the other cap segment 151 having a thin annular width with an open filagree-like pattern design 152 formed on the inner peripheral surface and/or an open filagree-like design 154 formed on the outer peripheral surface.

10 Figure 36 shows a cap 153 with one cap segment 155 having a cloverleaf or wide cross opening, while the other segment 157 has a circular opening with a filagree-like or thin filament arrangement forming a star over the opening therein.

Figure 37 shows a cap 159 in which one segment 161 has a
15 square opening therein, and the other segment 163 has a heart
shaped opening.

It is to be understood that interior and exterior shapes or designs of the cap segments of a dual segment decorative jewelry item may be the same for both segments, or they may be 20 different. For example, Figures 34-37 show different designs for the two segments, but a designer may choose to make both segments identical, choosing the desired design for each segment from any one of the examples illustrated or suggested by such illustrations.

25 Figure 38 is a view similar to that shown in Figure 25, but with the prong openings 173 in the upper surface 174 of base 171 being rectangular instead of circular.

Figures 39 and 40 show a front and side perspective view of a cap 175 which has the shape of a figure-8 and has serrations along its entire outer peripheral surface. Additionally, the

WO 01/13754 PCT/US00/18389

29

prongs 179 are rectangular in shape so as to fit within the rectangular openings 173 of the base member 171 shown in Figure 38.

Figures 41 and 42 are side perspective and front perspective
views, respectively, of the assembled decorative jewelry item
employing the base 171 of Figure 38 and cap 175 of Figure 39.
In these figures, it will be observed that the cap 175 has a
pair of circular openings exposing the decorative objects
below, while the thin radial width of each cap segment is such
that a large portion of the upper surface 174 of base 177 is
exposed outside of the serrated outer edge of cap 175.

Figure 43 shows the possibility of providing surface texturing or design features in the portion of the upper surface 177 exposed outside of the installed cap 175.

15 Figure 44 is a view similar to that shown in Figure 39, except that the outer peripheral surface of the cap 181 is smooth, while the interior surface of the two openings therein is serrated, or otherwise textured.

Figure 45 is a view similar to that of Figure 42, except that

20 the cap has the features of Figure 44 instead of those of
Figure 39. If desired, the top surface of cap 181 may also be
serrated, or it may have a conical appearance.

Figure 46 is a side view of a decorative jewelry item in which the cap 191 has a multi-stepped configuration, in Figure 46.

25 only a non-limiting two-step configuration being shown. The outer edges of both stepped portions 193, 195 are serrated, or otherwise textured, and the top surface of each step 193, 195 is also serrated or otherwise textured. For consistency of design, the base member 199 may also be provided with a serrated or otherwise textured upper surface 197.

Figures 47-54 depict single non-segmented decorative jewelry items suggesting several options in the manufacture of such single non-segmented jewelry items. For example, Figure 47 is a single segment version of the arrangement shown in Figure 23, the decorative jewelry item 201 having a connector tab 203 for connecting to a similar decorative jewelry item in forming a necklace or tennis bracelet, for example.

Figure 48 should be understood to represent a front perspective view of the decorative jewelry item 201 shown in 10 Figure 47, or it can be understood that the variation shown in Figure 48 does not have a connector tab 203, and therefore may be inserted into a cylindrical pocket of a larger article of jewelry such as a necklace, pendant, ring, or the like, to be described hereinafter.

15 Figure 49 shows a side perspective view of a decorative jewelry item 205 having a sidewall of base member 207 with no windows formed therein, meaning that the cap 206 is fixed to the base member 207 by means of depending tabs bent over inside the hollow base member 207 or is soldered, welded, or 20 otherwise bonded to base.

Figure 50 is a front perspective view of the decorative jewelry item of Figure 49, but it also may represent a view of a decorative jewelry item 205 without any connector tab 204.

Figure 51 is a view similar to that shown in Figure 49, except
25 that the sidewall 209 of the decorative jewelry item 211 has
formed therein or thereon a selection of letters and/or
symbols 213. The designs and patterns may be cutouts or
engravings of shapes and/or letters.

Figure 52 is a side perspective view similar to that shown in 30 Figure 51 of a decorative jewelry item 215 in which the sidewall 217 has designed openings 219 therein, in Figure 52 such openings 219 being heart shaped.

Figure 53 shows a decorative jewelry item 221 similar to that shown in Figure 49, except that a line pattern is formed on 5 the sidewall 223. The line pattern may be placed over the entire sidewall outer surface or on only selectable locations, at the whim of the jewelry designer.

Figure 54 shows a single non-segmented decorative jewelry item 227 having a heart shaped base 229 and a heart shaped cap 231 with a concave upper surface.

Figure 55 shows a length of bracelet 231 of arbitrary design having a number of cylindrical pockets 233 formed therein. The pockets 233 are sized to accept any of the single cylindrical non-segmented decorative jewelry items described 15 herein, for example the decorative jewelry item 205 of Figure 50. An appropriate attaching process is employed to fix the decorative jewelry item 205 in place, such as by soldering, welding, adhesives, etc. 'Alternatively, instead of forming the bracelet 231 with pockets 233 for insertion of the base member 207 of a complete decorative jewelry item 205, the 20 bracelet 231 itself may be provided with an integral base portion, also numbered 233 in Figure 55, formed, for example, by casting. With such a construction, there are two possibilities for providing a decorative top for such integral base portion. One possibility is to place a decorative object on the top of the integral base portion, fixed or loose, and fit a cap over the decorative object the same as previously described for a decorative jewelry item employing a separate base member construction. Another possibility is to form the 30 base portion 233 to extend slightly above its surroundings, and form a diamond cut design in the top of the integral base portion 233. Thereafter, only a cap needs to be fitted over the integrally formed base portion 233 to complete the

decorative jewelry item. Of course, if the top of the integral base portion 233 extends outwardly far enough, a cap may be applied first, and then the top of the integral base portion 233 can be diamond cut.

- 5 Figure 56 is a portion of a necklace 235 having a center piece 237 of arbitrary design and also containing a number of cylindrical pockets 239 formed therein. Again, an insertable decorative jewelry item such as that shown in Figure 50 may be fixedly attached within the cylindrical pockets 239.
- 10 Alternatively, as with the bracelet of Figure 55, a base, also numbered 239 in Figure 56, may be integrally formed when the necklace center piece is formed.
- Figure 57 shows a front perspective view of a finger ring of arbitrary design, except that a front central area of the ring 15 241 has a heart shaped pocket 243 formed therein for accepting a single non-segmented decorative jewelry item such as that shown in Figure 54. Alternatively, as with the bracelet of Figure 55, the base, also numbered 243 in Figure 57, may be integrally formed when the ring is formed.
- 20 Figure 58 similarly shows a pendant, or broach, 245 of arbitrary design having a number of cylindrical pockets 247 formed therein to accept a single non-segmented decorative jewelry item. Alternatively, as with the bracelet of Figure 55, the base, also numbered 247 in Figure 58, may be
- 25 integrally formed when the pendant or broach is formed.

Figure 59 shows a dangling earring 249 in which a number of rectangular and oval shaped decorative jewelry items 451, 453 are connected together in an unusual and interesting fashion.

The square-shaped or diamond-shaped decorative jewelry items
30 451 and each of the oval decorative jewelry items 253 are
constructed in the same manner as described herein for the

manufacture of a single non-segmented decorative jewelry item.

The individual portions of the earring 249 may be connected by a wire, string, or coupling member, or they may be, in desired places, soldered, welded, cast together as a unit, or otherwise fixedly bonded together.

Figures 60-64 show a decorative jewelry item having the form of a dual base member 261 for receiving a pair of decorative inserts 275 (Figure 62) either in a fixed position within base member 261 or loosely captured within base member 261.

10 The base member 261 has a hollow interior, a top 262 with a pair of heart shaped openings formed therein leading to a hollow interior. A sidewall 263 extends from the top surface 262 downwardly and has at least one opening 269 therein in each of the two segments 263, 265 of the base member 261. In 15 the front and side perspective views shown in Figures 60 and 61, it will be observed that a pair of bent latch fingers 267 are attached to the bottom of the sidewall 263. In the preferred embodiment, latch fingers 267 are formed on the bottom surface of a window 264 formed at the bottom of the 20 base member 261 in each segment 263, 265.

The base member 261 is manufactured, or prepared during assembly, such that the latch fingers 267 are bent away from the top window opening 269, as best seen in Figure 61. This permits the insertion of a pair of decorative inserts 275 through the sidewall openings 269 and into the hollow interior of the base member 261, as best seen in Figure 63. After full insertion of the two decorative inserts 275, the latch fingers 267 are bent upwardly to align precisely with the upper edge of the opening 269 and preferably through a cutout 266 in a support plate 271, 272 shown in Figure 60. In this manner, the decorative insert 275 is captured within the base member 261 between the base member top 262 and the support plate 271. The upwardly bent latch fingers 267 are soldered or glued in

place after the heart shaped decorative inserts 275 are installed

The support plate 272 is shown to have a heart shaped opening therein, primarily to lessen the amount of precious metal used in the construction of the decorative jewelry item and yet provide adequate support for the heart shaped insert 275.

It will be understood that an adhesive or other type of material or molecular bonding may fix the decorative inserts 275 on the support plates 271, 272, or the decorative inserts 275 may be loosely captured between the support plate 271, 272 and top 262 of the base member 261. In such a case, the openings in the top surface 262 and the support plate 272 must necessarily be of a size smaller than the size of the decorative insert to prevent dislodging of the insert 275 inadvertently.

Figure 65 is a cross sectional view of a variation of the present invention in which the jewelry item 281 comprises a real precious stone, or gem 287, as the decorative object captured between a cap 283 and a base member 285. The cap 283 can be secured to base member 285 by any of the methods described above.

The precious stone 287 shown has its widest dimension larger than both the opening 289 ir cap 283 and the distance between the inwardly ends of projecting tabs 293 in base member 285.

25 This is best seen in Figure 66 which is a top view of just the base member 285 of the variation shown in Figure 65, with the cap removed and with the precious stone 287 schematically represented by a dashed line.

The base member 285 has a depth sufficient to prevent the
30 bottom 297 of the precious stone 287 from extending below the
base member, thereby protecting the wearer of the jewelry item

WO 01/13754 PCT/US00/18389

35

281 from being punctured by the sharp end 297 of the stone 287.

The base member 285 has a sidewall 290 extending downwardly from the decorative top 287,293, the sidewall 290 having a plurality of open windows 295 formed therein. The top surface opening 292 of the base member top surface 293 has an inner peripheral edge 294 and a plurality of tabs 293 projecting inwardly from the peripheral edge, the tabs 293 being of a length sufficient to prevent the precious stone 287 from falling through the top surface opening 292, whereby the precious stone 287 is supported by the tabs 293 with minimal blockage of light entering the sidewall windows 295 and illuminating the precious stone 287 from beneath.

In a preferred embodiment of Figures 65 and 66, the stone 287

15 is seen to be loosely captured between the cap 283 and base member top surface (i.e., tabs 293 in the embodiment shown). However, it is within the skill of a craftsman to configure and dimension the cap opening 289 and length and number of tabs 293 to clamp the precious stone 287 securely between the 20 cap 283 and base member 285, if desired.

Figure 67 is a partial cross sectional view of a first type of teetering mechanism between a decorative object 301 and the top surface of a base member 303. In this variation, the base member top surface 303 extends across the interior of the base member, such as that shown in Figure 33, wherein the base member top surface 135,303 has an upwardly projecting bump 305 positioned thereon, and the decorative object 121,301 has a bottom which rests on the bump 305, whereby the loosely captured decorative object 301 teeters on the bump 305 functioning as a fulcrum.

Figure 68 is a partial cross sectional view of a second type of teetering mechanism between a decorative object 307 and the

top surface 309 of a base member. Here, the base member top surface 309 extends across the hollow interior of the base member, and the decorative object 307 has a bottom with a downwardly projecting bump 311 positioned thereon, whereby the loosely captured decorative object 307 teeters on the bump 311 functioning as a fulcrum. The base member top surface 309 may be a plate-like member spanning the entire extent of the interior of the base member, or it may be a band or strap connected at its ends across the extent of the interior of the

With reference to Figure 69, if desired, for more security in keeping the decorative object 301 centered within the decorative jewelry item, the decorative object 313 may have a bottom with a depression 319 therein in alignment with, and sized to receive, the upwardly projecting bump 317 positioned on the base member top surface 315. In such a case, the dimensional design of the cap and base member employing the teetering mechanism of Figure 69 will be such so as to not permit the bump 317 from exiting the depression 319.

- 20 Similarly, and consistent with the variation shown in Figure 69, the base member top surface 309 shown in Figure 68 may have a depression (not shown) therein in alignment with, and sized to receive, the downwardly projecting bump 311 positioned on the bottom of the decorative object 307.
- 25 Figure 70 is a cross sectional view of a decorative jewelry item 321 having a cap 323 fitted to a base member 325 with a rotatable decorative object 329 pivotally mounted at the top of the base member 325 between the base member 325 and the cap 323. The decorative object 329 may have a diamond cut upper 30 surface 330, or it may be made decorative by employing any of the surface preparation processes described herein. The cap 323 has a central opening 327 which preferably is sized smaller than the rotatable decorative object 329 so as to keep

the decorative object 329 from excessive tilting and exposing an edge above the top of cap 323. Alternatively, the opening 327 may be purposely sized larger to allow the decorative object 329 to rotate as much as 360°, if desired. Similarly, the base member 325 may have a plate, or strap, or tab (not shown) fixed to the interior thereof to prevent full rotation of the decorative object 329 even when the cap opening 327 is sized larger than the decorative object 329.

Referencing the cross sectional view in Figure 70 and the top
view of the base member and decorative object combination in
Figure 71 with the cap removed, the base member 325 is seen to
have a hollow interior, and the decorative top 332,329 thereof
comprises: a top surface 332 with an opening 334 therein
leading to the hollow interior, and the decorative object 329.
The decorative object 329 is rotatably mounted in the recess
326 between the base member 325 and the cap 323 using axially
aligned pins 331 resting in, and rotatable in, corresponding
oppositely facing side notches 333 formed in the base member
top surface 332, whereby the decorative object 329 is free to
rotate within the recess 326 about an axis passing through the
pins 331. The notches 333 open laterally into the base member
top surface opening 334.

Figures 72-86 depict alternative constructions in which a decorative insert is inserted, through an opening in the top of a hollow base member (single or segmented), and is fixed within the base member with the insert below the base member top and viewable through the top opening.

In the perspective views of Figures 72 and 73, a single heart shaped base member 341 is shown to have a top, or bezel, 343 which may be flat, concave, conical, and/or textured. The top 343 has a heart shaped opening 344 leading to the hollow interior of the base member 341. A sidewall 345 has openings 347, and the base member 341 is provided with a connector

tongue 349 which connects with an opening 351 on the opposite side of another base member.

Spanning across the hollow interior of base member 341 sis a support brace 353 having an insert support 355 fixed thereto, the insert support 355 having a hole 357 sized, shaped, and oriented to receive the pin 363 of a decorative object 359 shown in Figures 74 and 75. The decorative object 359 comprises a plate-like decorative insert 361 having mounting pin 363 projecting from its rear.

10 Other configurations of base members which can receive a decorative insert inserted from the top are shown in Figures 76 and 77. In Figure 76, a base member 365, having a top 367, sidewalls 369, a connector tongue 377 and mating rear opening 279, and window openings 371 in the sidewalls 369, also has an insert support in the form of a flat plate-like member 373. A flat decorative insert, like that of Figure 62 may be inserted through the top opening 368 and affixed to the insert support 373 by any known process. An optional hole 375 may be provided to accept a decorative insert of the type shown in 20 Figures 74 and 75.

In Figure 77, a base member 381 having a top 383, sidewalls 385 with windows 387, and an top opening 384, also has an insert support 389. In order to save precious metal, the insert support 389 has a central opening 390 which has 25 negligible effect on the mounting security of a decorative insert affixed to the insert support 384.

Turning now to Figures 78-80, Figure 78 shows the decorative object 359 partially inserted in the hole 357 of insert support 355, and Figures 79 and 80 show side and front perspective views, respectively, of a fully assembled jewelry article comprising base member 341 and decorative object 359.

Typically, the decorative object 359 will be rigidly fixed to the insert support 355 (or 373, or 389) by a process selected from the group consisting of applying an adhesive, soldering, welding including laser welding, molecular bonding, swaging,

- 5 bending, and clamping. However, a variation of such an assembly is to fix the decorative object 359 within the hollow interior of base member 341, but permit it to move about when the wearer of the jewelry article moves, thereby creating interesting visual effects.
- 10 To accomplish this, rather than to solidly affix the decorative object 359 in place, pin 361 (Figure 75) can pass through the hole 357,375 in its support 355,373 and be bent, or have an adhesive, solder, weld, or retainer 363 applied on pin 361 below and spaced from its support 355 or 373
- 15 (suggested by the dashed lines 355 in Figure 75). By making the hole 357, 375 slightly larger than the pin 359, the decorative object 359 is free to rotate and slidably move toward and away from the top of the base member 341, 365 to a limited extent, and if the hole is large enough, the
- 20 decorative object 359 may additionally tilt, all adding to the visual character of the completed jewelry item.

Figures 81-86 illustrate dual segmented versions of the single segment jewelry articles depicted in Figures 72-80. As such, no additional detailed description is warranted, other than to

- 25 identify the corresponding elements of the different embodiments.
- In Figures 81, 82, and 84-86, a dual segment heart shaped base member 395 is illustrated, each segment having a hollow interior, a top 397 with heart shaped openings 398, sidewalls 30 399, windows 401 formed in the sidewalls 399, a support brace
  - 399, windows 401 formed in the sidewalls 399, a support brace 407, and an insert support 409 with a hole 411 therein.

WO 01/13754 PCT/US00/18389

A pair of decorative objects 359, with their plate-like decorative inserts 361 and rear projecting pins 363, are shown just being inserted in insert supports 409 in Figure 84.

Figures 85 and 86 show, respectively, side and front

5 perspective views of the completed dual segmented jewelry arricle

In the manufacture of multiple segmented jewelry articles, precious metal and labor cost savings can be realized by providing a means to mount a multiple segmented decorative

10 insert within a multiple segmented base member with a minimum amount of bonded contact and yet maintain a high degree of structural integrity. One example of this can be seen by reference to a representative embodiment shown in Figures 87-89.

- 15 Figures 87 and 88 depict a multiple segmented decorative object 421 having multiple segmented plate-like inserts 423 connected together by integral bridging portions 424. As seen in Figure 88, only the end inserts 423 have rear projecting pins 425.
- 20 Figure 89 shows a corresponding multiple segmented base member 427 having base portions 429, 431, and 433. Base portions 429 and 433 each have an insert support 435 and 439, respectively, each insert support 435,439 having a hole 437,441 therein for accepting the rear projecting pins 425 of the multiple
- 25 segmented decorative object 421. Channels 428 accept bridging portions 424 of a segmented decorative object 421. With this configuration, precious metal is saved by the elimination of a center insert support and center pin on decorative object 421, and the creation of channels 428. Manufacturing cost is also
- 30 reduced due to the labor and materials saved by not having to fix a center pin of the center decorative insert 423 to an underlying insert support. Yet, the structural integrity of the jewelry article is obviously not adversely affected.

In this specification, where fixing or bonding is suggested, such fixing or bonding processing is intended to be selected from a number of available processes suitable for the task at hand including soldering, swaging, bending of prongs, applying of adhesive, and welding including laser welding, sonic welding, and other molecular bonding techniques.

Additionally, in this specification, where a decorative top, decorative object, decorative insert, or surface texturing or design are suggested, it is to be understood that such surface treatment may be selected from any of a large number of surface treatment processes, including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping. In addition to having different surface treatments, the decorative object or insert may also be made of a different material than its base member or cap.

In like manner, the circular and heart shaped decorative objects and inserts shown and described herein are merely examples of an unlimited number of shapes and configurations, and the invention is not to be limited to the shapes and configurations depicted in the drawing and described herein. For example, one interesting shape configuration for a decorative insert is that of a daisy flower with a center stem. In such an embodiment, the plate-like daisy flower insert may purposely be positioned spaced from the underlying insert support to simulate a flower at the end of a flower stem.

While Figures 60-64 and 72-88 show the decorative inserts

30 being supported by a provided insert support member within the
interior of the base member, it is equally preferred to have
the decorative insert integrally formed with the formation of

the base member, again diminishing labor costs. In one such embodiment, rather than referring to an opening in the top of the base member, it would be more accurate to refer to a recess in the top portion of the base member. That is, for the purposes of implementing the invention, the decorative insert support may be installed within the hollow base member or be made integrally with it, and where a top opening is mentioned in this text, it is to be interpreted as meaning either a top opening or a top recess.

10 It is to be understood that, while most of the embodiments of the present invention advantageously position the decorative object below the top surface of its base member, it is within the scope of the invention to have the depth of the recess or opening in the base member top to be slightly smaller or
15 greater than the thickness of the decorative insert.

It is further to be understood that the number of connected modules to form a multiple-segment decorative jewelry item, and the geometrical arrangement of such connected modules, is virtually limitless. The specific arrangements shown and described herein are exemplary only.

In all embodiments and variations of the invention, the base members and caps do not necessarily have to be of the same type of material (metal) or color. For example, the base member can be silver, while the cap is yellow gold, or the base member and cap can be of different gold karat weights. Another example is a white gold base member with a pink gold cap. It is also within the scope of the present invention to make the base member of plastic or other hard material that is aesthetically pleasing to the eye.

30 While only certain embodiments of the invention have been set forth above, alternative embodiments and various modifications will be apparent from the above description and the WO 01/13754 PCT/US00/18389

43

accompanying drawing to those skilled in the art. For example, although specific examples are shown and described for convenience and ease of understanding, in variations of the invention, the base member or base member segments, the cap or cap segments, the openings in the cap or cap segments, the decorative objects, and the decorative inserts may, independently, be circular, square shaped, diamond shaped, heart shaped, and the like. Any combination of these and other geometric shapes are intended to be within the scope of

Likewise, it is contemplated that the designer may select for the base members, caps, objects, and inserts, surface features such as serrated surfaces, smooth surfaces, faceted surfaces, planar surfaces, convex surfaces, concave surfaces, conical surfaces, straight peripheral sides, stepped peripheral sides, as well as other shapes as described herein, including combinations of such features in a virtually limitless number of arrangements and presentations.

Additionally, although single and dual-segmented decorative
jewelry items are shown and described in detail herein, any
desired number of segments may be selected, the construction
of which would be well within the skill of a person working in
the jewelry art following the teaching in this description.

As described, the decorative object(s) and exposed surfaces of
the stepped portion of the base units have preferred surface
textures as shown and described. However, at the discretion
of the designer, any or selected ones of such surfaces may be
faceted, knurled, smooth, shiny, colored, frosted, or formed
with diffraction gratings or filigree patterns, or may have
thereon random markings, organized markings, and/or may be
textured to simulate real dems.

20

WO 01/13754 PCT/US00/18389

In the preferred embodiments shown and described herein, the fastening means for fixing the cap to the base member, fixing a decorative object to the top surface of a base member, or maintaining a decorative insert within the hollow interior of a base member, may be implemented by methods such as soldering, swaging, scoring, adhesive bonding, and welding including laser welding. Swaging, scoring, and laser welding are techniques that work well with certain assembly process steps in accordance with the present invention, but are not suitable for fixing real gems in place due in large part to the configuration, shape, and weight of real gems. As to laser welding, reference is made to the apparatus and methods of laser welding techniques disclosed in California Precision Products Co. Catalog "Laser Spot-Welding Systems", One 15 Industrial Court, Riverside, Rhode Island 02915, U.S.A. The document mentioned in the preceding sentence is incorporated herein by this reference.

These and other alternatives and variations are considered equivalents and within the spirit and scope of the present invention.

The invention illustratively disclosed herein suitably may be practiced in the absence of any element which is not specifically disclosed herein.

The following claims are entitled to the broadest
25 possible scope consistent with this application. The claims shall
not necessarily be limited to the preferred embodiments or to the
embodiments shown in the examples.

## WHAT IS CLAIMED IS

- 1. A decorative jewelry item, comprising:
  - a hollow base member having a decorative top;
  - a cap with an opening therein; and
- a cap attachment arrangement for attaching said cap to said hollow base member with at least a portion of said decorative top being viewable through said cap opening.
- The decorative jewelry item as claimed in Claim 1, wherein said base member decorative top is fashioned to exhibit an integral decorative exterior surface which is viewable through said cap opening.
- 3. The decorative jewelry item as claimed in Claim 1, wherein said decorative top comprises:
  - a top surface of said hollow base member; and
- a decorative object configured and sized in relation to said base member to be placed on said top surface.
- The decorative jewelry item as claimed in Claim 3, wherein: said cap has a top surface; and

said decorative object is fixed on said base member below said cap top surface.

- 5. The decorative jewelry item as claimed in Claim 3, wherein: said cap has a top surface; and
- said decorative object is fixed on said base member and projects through said cap opening.
- 6. The decorative jewelry item as claimed in Claim 5, wherein said decorative object extends above said cap top surface.
- 7. The decorative jewelry item as claimed in Claim 3, wherein: at least one of said base top surface and said cap has a recess therein; and

fu

WO 01/13754 PCT/US00/18389

46

said cap attaching arrangement fixes said cap to said base member whereby said decorative object is loosely captured between said base member and said cap and is free to move within said recess.

- 8. The decorative jewelry item as claimed in Claim 1, wherein said cap is fixed to said base member by a process selected from the group consisting of soldering, swaging, bending of prongs, applying of adhesive, and welding including laser welding.
- The decorative jewelry item as claimed in Claim 4, wherein said cap top surface exhibits an integral decorative exterior surface.
- 10. The decorative jewelry item as claimed in Claim 1, wherein:

said base member has a sidewall extending downwardly from said decorative top, said sidewall having at least one cutout therein: and

said cap attachment arrangement comprises at least one prong depending downwardly from said cap, said prong adapted to be bent into said cutout when said cap is placed over said decorative top.

11. The decorative jewelry item as claimed in Claim 10, wherein:

said sidewall of said base member has at least one window opening to the interior of said hollow base member; and said at least one cutout is formed at the top of said at

least one window.

12. The decorative jewelry item as claimed in Claim 11, wherein:

said base member sidewall has a plurality of windows formed therein and cutouts formed in selected ones of said windows: and

said cap comprises a plurality of prongs equal in number to the number of cutouts in said windows.

- 13. The decorative jewelry item as claimed in Claim 12, wherein the number of windows is greater than the number of prongs and cutouts.
- 14. The decorative jewelry item as claimed in Claim 1, formed integrally with a like decorative jewelry item in a manner to align said decorative tops generally in a common plane, wherein:

said base member has a sidewall extending downwardly from said decorative top, said sidewall having at least one window formed therein leading to the interior of said hollow base member; and

said base member comprises a connector element for connecting said decorative jewelry item to a like decorative integral jewelry item by bending said connector element of one decorative jewelry item after passing through a sidewall window in an adjacent decorative jewelry item.

15. The decorative jewelry item as claimed in Claim 1, wherein said base member has a sidewall extending downwardly from said decorative top; and

said cap attachment arrangement is implemented by the provision on said cap of a downwardly directed peripheral wall, said cap wall covering a relatively small top portion of said base member sidewall when said cap is placed over said decorative top.

16. The decorative jewelry item as claimed in Claim 15, wherein said cap is fixed to said base member, after being placed over said decorative top, by a process selected from

the group consisting of soldering, swaging, bending of prongs, applying of adhesive, and welding including laser welding.

17. The decorative jewelry item as claimed in Claim 1, wherein:

said base member has a sidewall extending downwardly from said decorative top and encompassing the interior of said hollow base member;

said base member decorative top has at least one hole therein leading downwardly into the interior of said hollow hase member: and

said cap attachment arrangement comprises at least one prong depending downwardly from said cap, said prong adapted to be passed through said at least one hole in said decorative top and bent over within the interior of said hollow base member when said cap is placed over said decorative top.

18. The decorative jewelry item as claimed in Claim 17, wherein:

said base member decorative top has a plurality of holes formed therein; and

said cap comprises a plurality of prongs equal in number to the number of holes in said decorative top.

- 19. The decorative jewelry item as claimed in Claim 1, wherein said base member top is made decorative by performing at least one of a number of surface preparation processes on at least a portion of said sidewall, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.
- 20. The decorative jewelry item as claimed in Claim 10, wherein said base member sidewall is made decorative by performing at least one of a number of surface preparation

processes on at least a portion of said sidewall, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.

21. The decorative jewelry item as claimed in Claim 1, wherein:

said cap has a top surface; and

said cap top surface is made decorative by performing at least one of a number of surface preparation processes on at least a portion of said cap top surface, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.

22. The decorative jewelry item as claimed in Claim 1, wherein:

said cap has a peripheral edge; and

said cap edge is made decorative by performing at least one of a number of surface preparation processes on at least a portion of said cap edge, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.

23. The decorative jewelry item as claimed in Claim 3, wherein:

said decorative object is plate-shaped and has an upper decorative surface. 24. The decorative jewelry item as claimed in Claim 1, wherein:

said base member comprises a linking arrangement for linking said decorative jewelry item to a like decorative jewelry item.

25. The decorative jewelry item as claimed in Claim 1, wherein:

said base member has a stepped top outside peripheral surface comprising a vertical wall portion and a horizontal step portion.

26. The decorative jewelry item as claimed in Claim 25, wherein:

said horizontal step portion has an irregular exposed surface.

27. The decorative jewelry item as claimed in Claim 1, wherein:

said cap has a planar top surface.

28. The decorative jewelry item as claimed in Claim 1, wherein:

\_said cap has a generally conical top surface.

29. The decorative jewelry item as claimed in Claim 1, wherein:

said base member is segmented, defining a plurality of base member segments each having a decorative top, fixedly connected together side-by-side;

said cap is segmented, defining a like plurality of cap segments each having an opening therein, fixedly connected together side-by-side; and

said cap attachment means is adapted to attach said segmented cap to said segmented base member with at least a

51 portion of each said decorative top being viewable through said cap openings.

30. The decorative jewelry item as claimed in Claim 29. wherein:

said base member segments are substantially identical to one another in geometrical shape; and

said cap segments are of the same geometrical shape as the corresponding ones of said base member segments.

The decorative jewelry item as claimed in Claim 29. wherein:

said base member segments are substantially identical to one another in geometrical shape; and

at least one of said cap segments is of a geometrical shape different than that or its corresponding base member segment.

The decorative jewelry item as claimed in Claim 31, wherein:

each of said base member segments is circular in horizontal cross section;

each of said decorative tops has a diamond cut exposed \_surface:

one of said cap segments has a circular outer periphery and a circular opening therein; and

another of said cap segments has a circular outer periphery and a heart shaped opening therein.

33. The decorative jewelry item as claimed in Claim 1, wherein:

said base member has a sidewall extending downwardly from said decorative top, said sidewall having at least one window opening therein; and

said cap attachment arrangement comprises at least one pronq depending downwardly from said cap, said pronq adapted to be bent into said window opening when said cap is placed over said decorative top.

34. The decorative jewelry item as claimed in Claim 33, wherein:

said sidewall of said base member has at least one channel formed therein, leading from said decorative top to said window opening; and

said at least one prong extends from a bottom surface of said cap, is contained within said channel, and is bent over inwardly of said base member through said window opening, when said cap is placed over said decorative top.

- 35. The decorative jewelry item as claimed in Claim 34, wherein said decorative top and said cap have identical outer peripheral surfaces.
- 36. The decorative jewelry item as claimed in Claim 17, wherein said holes in said decorative top, and said prongs, are rectangular in cross section.
- 37. The decorative jewelry item as claimed in Claim 1, wherein said decorative top has a raised decorative portion protruding into said cap opening.
- 38. The decorative jewelry item as claimed in Claim 37, wherein said raised decorative portion protrudes through said cap opening to a position above said cap.
- 39. The decorative jewelry item as claimed in Claim 38, wherein:

said decorative top comprises a top surface of said hollow base member; and

said raised decorative portion is a separate decorative object fixed to said top surface.

40. The decorative jewelry item as claimed in Claim 7, wherein:

said base top surface is substantially planar; and said cap has a cupped bottom to accommodate said decorative object loosely between said cap and said base member top surface.

41. The decorative jewelry item as claimed in Claim 1, wherein:

said hollow base member is made from a first material of a first color; and

said cap is made from a second material of a different color.

- 42. The decorative jewelry item as claimed in Claim 1, wherein said cap has a top surface configuration selected from the group of surface configurations consisting of planar, concave, convex, conical, concave-conical, and convex-conical.
- 43. The decorative jewelry item as claimed in Claim 34, wherein:

said base member sidewall has a plurality of windows formed therein and a plurality of channels leading from said decorative top to selected ones of said windows;

said cap comprises a plurality of prongs equal in number to the number of channels in said sidewall; and

the number of windows is at least as great as the number of prongs and channels.

44. The decorative jewelry item as claimed in Claim 29, wherein:

said decorative tops of said plurality of base member segments are not alike, each said decorative top having its own characteristic shape, design, and visual appearance. 45. The decorative jewelry item as claimed in Claim 29, wherein:

said cap segments are not alike, each said cap having a top surface exhibiting its own characteristic shape, design, and visual appearance.

46. The decorative jewelry item as claimed in Claim 29, wherein:

said cap segments are not alike, each said cap having a peripheral side surface exhibiting its own characteristic shape, design, and visual appearance.

47. The decorative jewelry item as claimed in Claim 29, wherein:

said cap segments are not alike, each said cap having an opening with its own shape, design, and visual appearance.

- 48. The decorative jewelry item as claimed in Claim 47, wherein each of said cap openings has a shape and configuration selected from the group consisting of circular, square, heart-shaped, cross-shaped, scalloped, star-shaped, serrated, knurled, undulated, rippled, clover leaf shaped, triangular, and polygonal.
- 49. The decorative jewelry item as claimed in Claim 48, wherein at least one of said caps has a filagree-like ornamentation extending into its opening.
- 50. The decorative jewelry item as claimed in Claim 3, wherein:

said base member is segmented, defining a plurality of base member segments each having an independent decorative top, fixedly connected together side-by-side;

said cap is segmented, defining a like plurality of cap segments each having an opening therein, fixedly connected together side-by-side; and said cap attachment means is adapted to attach said segmented cap to said segmented base member with at least a portion of each said decorative top being viewable through said cap openings.

- 51. The decorative jewelry item as claimed in Claim 50, wherein said independent decorative tops comprise independent decorative objects having different visual appearances.
- 52. The decorative jewelry item as claimed in Claim 51, wherein said independent decorative objects have different shapes selected from the group consisting of circular, square, heart-shaped, cross-shaped, scalloped, star-shaped, undulated, rippled, clover leaf shaped, triangular, and polygonal.
- 53. The decorative jewelry item as claimed in Claim 1, wherein:

said cap has an outer periphery, an inner periphery, and a relatively narrow width between said outer and inner peripheries, such that a portion of said decorative top is exposed outside said cap outer periphery.

54. The decorative jewelry item as claimed in Claim 53, wherein:

a portion of said decorative top exposed through said cap opening has a different visual appearance than a portion of said decorative top exposed outside said cap outer periphery.

55. The decorative jewelry item as claimed in Claim 54, wherein:

said decorative top portion exposed through said cap opening has a diamond cut surface; and

said decorative top portion exposed outside said cap outer periphery has a surface finish selected from the group consisting of faceted, knurled, smooth, shiny, colored, frosted, formed with diffraction gratings, formed with applied filigree patterns, random markings, organized markings, and textured

56. The decorative jewelry item as claimed in Claim 54, wherein said cap outer periphery has a surface finish selected from the group consisting of faceted, knurled, smooth, shiny, colored, frosted, formed with diffraction gratings, formed with applied filigree patterns, random markings, organized markings, and textured.

57. The decorative jewelry item as claimed in Claim 29, wherein:

each said cap has an inner periphery, a connected outer periphery, and a relatively narrow width between said outer and inner peripheries, such that a portion of each said decorative top is exposed outside said cap outer periphery.

58. The decorative jewelry item as claimed in Claim 57, wherein:

a portion of each said decorative top that is exposed through a respective cap opening has a different visual appearance than a portion of said decorative top exposed outside said cap outer periphery.

59. The decorative jewelry item as claimed in Claim 58, wherein:

each said decorative top portion exposed through said cap opening has a diamond cut surface; and

each said decorative top portion exposed outside said cap outer periphery has a surface finish selected from the group consisting of faceted, knurled, smooth, shiny, colored, frosted, formed with diffraction gratings, formed with applied filigree patterns, random markings, organized markings, and textured.

- 60. The decorative jewelry item as claimed in Claim 58, wherein said connected outer periphery of said cap has a surface finish selected from the group consisting of faceted, knurled, smooth, shiny, colored, frosted, formed with diffraction gratings, formed with applied filigree patterns, random markings, organized markings, and textured.
- 61. The decorative jewelry item as claimed in Claim 57, wherein:

each said base member decorative top comprises a top surface of said hollow base member, and a decorative object configured and sized in relation to said base member and said cap to be placed on said top surface and project through said cap opening.

62. The decorative jewelry item as claimed in Claim 1, wherein:

said cap has a stepped top outside peripheral surface comprising a vertical wall portion and a horizontal step portion.

- 63. A piece of jewelry with a designed structure including at least one recess for receiving the decorative jewelry item as claimed in Claim 1.
- 64. The piece of jewelry as claimed in Claim 63 wherein said decorative top comprises:
  - a top surface of said hollow base member; and
- a decorative object configured and sized in relation to said base member to be placed on said top surface.
- 65. The piece of jewelry as claimed in Claim 63 wherein said recess and said decorative top are circular.
- 66. The piece of jewelry as claimed in Claim 63 wherein said recess and said decorative top are heart shaped.

- 67. The piece of jewelry as claimed in Claim 63 manufactured as a decorative jewelry piece selected from the group consisting of a necklace, a bracelet, a ring, a pendant, a broach, and an earring.
- 68. A piece of jewelry with a designed structure, comprising: an integrally formed decorative portion having a decorative top;
  - a cap with an opening therein; and
- a cap attachment arrangement for attaching said cap to said decorative portion of said piece of jewelry with at least a portion of said decorative top being viewable through said cap opening.
- 69. The piece of jewelry as claimed in Claim 68, wherein said decorative top is fashioned to exhibit an integral decorative exterior surface which is viewable through said cap opening.
- 70. The piece of jewelry as claimed in Claim 68, wherein said decorative top comprises:
  - a top surface of said decorative portion; and
- a decorative object configured and sized in relation to said decorative portion to be placed on said top surface beneath said cap.
- 71. The piece of jewelry as claimed in Claim 68 manufactured as a decorative jewelry piece selected from the group consisting of a necklace, a bracelet, a ring, a pendant, a broach, and an earring.
- 72. A method for constructing a decorative jewelry item, comprising:

providing a base member having a hollow interior and a decorative top;

providing a cap with an opening therein; and

attaching said cap to said hollow base member with at least a portion of said decorative top being viewable through said cap opening.

- 73. The method as claimed in Claim 72, wherein said decorative top comprises a top surface of said hollow base member, and said step of providing a base member includes providing a decorative object configured and sized in relation to said base member to be placed and fit on said top surface and be captured between said base member top surface and said cap.
- 74. The method as claimed in Claim 73, wherein said cap has a top surface, and said method comprises fixing said decorative object on said base member below said cap top surface.
- 75. The method as claimed in Claim 73, wherein said cap has a top surface, and said method comprises, prior to fixing said decorative object on said base member:

positioning said cap above said hollow base member and aligning said cap concentric with said decorative object;

bringing said cap and base member together while guiding said decorative object to project through said cap opening.

- 76. The method as claimed in Claim 75, wherein said step of providing a decorative object comprises providing a decorative object of a thickness greater than the thickness of said cap, whereby, when said cap is fixed on said base member, said decorative object extends above said cap.
- 77. The method as claimed in Claim 73, wherein at least one of said base top surface and said cap has a recess therein; and

said step of attaching fixes said cap to said base member with said decorative object loosely captured between said base member and said cap, whereby said decorative object is free to move within said recess.

- 78. The method as claimed in Claim 72, wherein said cap is fixed to said base member by a process selected from the group consisting of soldering, swaging, bending of prongs, applying of adhesive, and welding including laser welding.
- 79. The method as claimed in Claim 72, wherein said step of providing a base member includes providing said base member with an integral decorative exterior surface.
- 80. The method as claimed in Claim 72, comprising the step of joining a decorative jewelry item made by said method integrally with a like decorative jewelry item in a manner to align said decorative tops generally in a common plane.
- 81. The method as claimed in Claim 72, wherein said base member is provided with a sidewall extending downwardly from said decorative top, said cap is provided with a downwardly directed peripheral wall, and said method comprises:

attaching said cap to said base member by fitting said cap wall over the top of said base member, covering a relatively small top portion of said base member sidewall when said cap is placed over said decorative top; and

affixing said cap to said base member by a process selected from the group consisting soldering, swaging, bending of prongs, applying of adhesive, and welding including laser welding.

82. The method as claimed in Claim 72, wherein:

said base member has a sidewall extending downwardly from said decorative top and encompassing the interior of said hollow base member, said cap comprises at least one prong depending downwardly from said cap, said base member decorative top has at least one hole therein leading downwardly into the interior of said hollow base member, and said attaching step includes:

passing said prong through said at least one hole in said decorative top; and

bending said prong over within the interior of said hollow base member after said cap is placed over said decorative top.

- 83. The method as claimed in Claim 72, wherein said base member top is made decorative by performing at least one of a number of surface preparation processes on at least a portion of said sidewall, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.
- 84. The method as claimed in Claim 72, wherein said base member has a sidewall depending downwardly from said decorative top, and said sidewall is made decorative by performing at least one of a number of surface preparation processes on at least a portion of said sidewall, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.
- 85. The method as claimed in Claim 72, wherein said cap has a top surface, and said cap top surface is made decorative by performing at least one of a number of surface preparation processes on at least a portion of said cap top surface, said surface preparation processes including diamond cutting, hole forming, embossing, engraving, lettering, forming line patterns, texturing, plating, coloring, etching, scoring, knurling, serrating, coating, painting, embossing, engraving, and shaping.

- 86. The method as claimed in Claim 72, wherein said base member is segmented, defining a plurality of base member segments each having a decorative top, fixedly connected together side-by-side, said cap is segmented, defining a like plurality of cap segments each having an opening therein, fixedly connected together side-by-side, and said attaching step includes attaching said segmented cap to said segmented base member with at least a portion of each said decorative top being viewable through said cap openings.
- 87. The method as claimed in Claim 72, wherein said base member comprises a sidewall downwardly depending from said decorative top, said sidewall having at least one window opening therein and at least one channel leading from said decorative top to said window opening, said cap has at least one prong extending from a bottom surface of said cap, and said attaching step includes:

fitting said cap over the top of said base member; bringing said cap into contact with said base member while guiding said prong through said sidewall channel; and

bending said prong over inwardly of said base member through said window opening.

88. The method as claimed in Claim 72, wherein:

said hollow base member is made from a first material of a first color; and

said cap is made from a second material of a different color.

89. The method as claimed in Claim 72, comprising:

providing a piece of jewelry having a designed structure with at least one recess therein for receiving the decorative jewelry item as claimed in Claim 1;

inserting said decorative jewelry item into said recess; and

fixing said decorative jewelry item in said recess by a process selected from the group consisting soldering, swaging, bending of prongs, applying of adhesive, and welding including laser welding.

## 90. A decorative jewelry item, comprising:

a base member having a hollow interior, a top with an opening therein leading to said hollow interior, a bottom, and a sidewall extending from said top to said bottom, said sidewall having an opening therein leading to said hollow interior:

a decorative insert configured and sized in relation to said base member to be inserted within said hollow interior through said sidewall opening and viewable through said top opening; and

a retainer for retaining said decorative insert within said base member hollow interior.

91. The decorative jewelry item as claimed in Claim 90, comprising:

a support member fixed to said base member within said hollow interior; and wherein

said decorative insert is captured within said base member between said base member top and said support member.

- 92. The decorative jewelry item as claimed in Claim 91, wherein said decorative insert is fixed to said support member within said base member.
- 93. The decorative jewelry item as claimed in Claim 91, wherein said decorative insert is loosely captured between said base member top and said support member.
- 94. The decorative jewelry item as claimed in Claim 90, wherein:

said base member comprises a tab bendable to a first position in which said sidewall opening is not blocked, and bendable to a second position in which said sidewall opening is blocked, whereby said tab is in said first position to permit placement of said insert member within said base member through said sidewall opening, and said tab is bent to said second position after said insert member is contained within said base member interior.

95. A method for constructing a decorative jewelry item, comprising:

providing a base member having a hollow interior, a top with an opening therein leading to said hollow interior, a bottom, and a sidewall extending from said top to said bottom, said sidewall having an opening therein leading to said hollow interior;

providing a decorative insert configured and sized in relation to said base member to be inserted within said hollow interior through said sidewall opening and viewable through said base member top opening; and

placing said decorative insert into said hollow base member through said sidewall opening with at least a portion of said decorative insert being viewable through said base member top opening.

96. The method as claimed in Claim 95, wherein:

said jewelry item comprises a support member fixed to the interior of said base member; and

said step of placing includes inserting said decorative insert into said sidewall opening between said base member top and said support member.

97. The method as claimed in Claim 96, wherein:

said base member comprises a tab having a first position in which said sidewall opening is not blocked to permit placement of said insert member within said base member

through said sidewall opening, and having a second position in which said sidewall opening is blocked; and

said method includes the further step of bending said tab to said second position after said insert member is contained within said base member interior.

- 98. The method as claimed in Claim 97, wherein said step of placing includes placing said decorative insert into said base member with said decorative insert.loosely captured between said base member top and said support member, whereby said decorative insert is free to have limited movement within said base member.
- 99. The method as claimed in Claim 97, wherein said step of placing includes placing said decorative insert into said base member and fixing said decorative insert to said support member.
- 100. The decorative jewelry item as claimed in Claim 1, wherein:

said base member has a hollow interior;

said decorative top comprises a top surface with an opening therein leading to said hollow interior, and a precious stone configured and sized in relation to said base member to be placed partially within said top surface opening while being prevented from falling through said top surface opening by said top surface;

at least one of said base top surface and said cap has a recess therein;

said cap attaching arrangement fixes said cap to said base member whereby said decorative object is loosely captured between said base member and said cap and is free to move within said recess.

101. The decorative jewelry item as claimed in Claim 100, wherein said base member has a depth sufficient to prevent the

bottom of said precious stone from extending below said base

102. The decorative jewelry item as claimed in Claim 101, wherein:

said base member has a sidewall extending downwardly from said decorative top, said sidewall having a plurality of open windows formed therein; and

said top surface opening has an inner peripheral edge and a plurality of tabs projecting inwardly from said peripheral edge, said tabs being of a length sufficient to prevent said precious stone from falling through said top surface opening;

whereby said precious stone is supported by said tabs with minimal blockage of light entering said sidewall windows and illuminating said precious stone from beneath.

103. The decorative jewelry item as claimed in Claim 7, wherein:

said base member top surface extends across the interior of said base member;

said base member top surface has an upwardly projecting bump positioned thereon; and

said decorative object has a bottom which rests on said bump, whereby said loosely captured decorative object teeters on said bump functioning as a fulcrum.

- 104. The decorative jewelry item as claimed in Claim 103, wherein said decorative object bottom has a depression therein in alignment with, and sized to receive, said upwardly projecting bump positioned on said base member top surface.
- 105. The decorative jewelry item as claimed in Claim 7, wherein:

said base member top surface extends across the interior of said base member: and

said decorative object has a bottom with a downwardly projecting bump positioned thereon, whereby said loosely captured decorative object teeters on said bump functioning as a fulcrum.

106. The decorative jewelry item as claimed in Claim 105, wherein said base member surface has a depression therein in alignment with, and sized to receive, said downwardly projecting bump positioned on said decorative object bottom.

107. The decorative jewelry item as claimed in Claim 7, wherein:

said decorative object is rotatably mounted in said recess between said base member and said cap using axially aligned pins resting in, and rotatable in, corresponding not the

108. The decorative jewelry item as claimed in Claim 107, wherein:

said base member has a hollow interior;

said base member top surface has an opening therethrough to said hollow interior, and a pair of oppositely facing side notches formed in said base member top surface, said notches opening laterally into said base member top surface opening;

said decorative object is sized smaller than said base member top surface opening; and

said decorative object has a pair of oppositely located outwardly extending side pins fitting into, and rotatable in, respective ones of said side notches; whereby

said decorative object is free to rotate within said recess about an axis passing through said pins.

109. The decorative jewelry item as claimed in Claim 1, wherein: said base member has at least one through hole formed in said decorative top at a location which is covered by said cap and hidden from view.

- 110. A decorative jewelry item, comprising:
- a base member having a hollow interior, a top with an opening therein leading to said hollow interior, a bottom, and a sidewall extending from said top to said bottom; and
- a decorative insert configured and sized in relation to said base member top opening to be inserted, through said top opening, into said hollow interior and positioned below said top;

said decorative insert being fixed within said base member hollow interior with said decorative insert viewable through said top opening.

- 111. The decorative jewelry item as claimed in Claim 110, comprising:
- a support member fixed to said base member within said hollow interior; and wherein  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left($

said decorative insert is captured within said base member between said base member top and said support member.

- 112. The decorative jewelry item as claimed in Claim 111, wherein said decorative insert is fixed to said support member within said base member by a process selected from the group consisting of applying an adhesive, soldering, welding including laser welding, molecular bonding, swaging, bending, and clamping.
- 113. The decorative jewelry item as claimed in Claim 111, wherein:

said decorative insert comprises a plate-like top and a rear projecting pin;

said support member has a hole therethrough for receiving said pin; and

said pin is fixed to said support member by a process selected from the group consisting of applying an adhesive, soldering, welding including laser welding, molecular bonding, swaqing, bending, and clamping.

114. The decorative jewelry item as claimed in Claim 111, wherein:

said decorative insert comprises a plate-like top and a rear projecting pin;

said support member has a hole therethrough for receiving said pin; and

said pin is fixed within said hollow base member by a retainer affixed to said pin below said support member, whereby said pin is slidable, to a limited extent, and rotatable in said insert support member, for an enhanced visual effect.

115. The decorative jewelry item as claimed in Claim 112, wherein:

said support member comprises a plate-like member fixed within said base member below said top.

116. The decorative jewelry item as claimed in Claim 113, wherein.

said support member comprises a plate-like member fixed within said base member below said top, said plate-like support member having a hole therein through which said pin may pass.

117. The decorative jewelry item as claimed in Claim 110, wherein:

said base member is segmented, and each said segment comprises a hollow interior, a top with an opening therein leading to said hollow interior, a bottom, and a sidewall extending from said top to said bottom; and

ones of said decorative insert, configured and sized in relation to each said segment top opening, are inserted, through said top openings, into said hollow interiors and positioned below said tops; WO 01/13754

said decorative inserts being fixed within respective segment hollow interiors with said decorative inserts viewable through said top openings.

118. A method for constructing a decorative jewelry item, comprising:

providing a base member having a hollow interior, a top with an opening therein leading to said hollow interior, a bottom, and a sidewall extending from said top to said bottom;

providing a decorative insert configured and sized in relation to said base member to be inserted through said top opening and into said hollow interior; and

placing said decorative insert into said hollow base member through said top opening and positioned below said top, whereby said decorative insert is viewable through said top opening.

119. The method as claimed in Claim 118, wherein:

said jewelry item comprises a support member fixed to the interior of said base member; and

said step of placing includes inserting said decorative insert through said top opening between said base member top and said support member.

120. The method as claimed in Claim 119, comprising, after said placing operation:

fixing said decorative insert to said support member within said base member.

121. The method as claimed in Claim 120, wherein:

said provided decorative insert comprises a plate-like top and a rear projecting pin;

said support member is provided with a hole therethrough for receiving said pin; and

said fixing operation includes fixing said pin to said support member by a process selected from the group consisting

of applying an adhesive, soldering, welding including laser welding, molecular bonding, swaging, bending, and clamping.

122. The method as claimed in Claim 121, wherein:

said provided base member is segmented and has a multiple segmented hollow interior, a top with a multiple segmented opening therein leading to said hollow interior, a bottom, and a sidewall extending from said top to said bottom:

said provided decorative insert is configured and sized in relation to said multiple segmented top opening to be inserted, through said multiple segmented top opening, into said hollow interior and positioned below said top; and

said fixing operation comprises inserting said multiple segmented decorative insert within said hollow interior with each segment of said multiple segmented decorative insert viewable through said top opening.

123. The method as claimed in Claim 122, wherein:

said multiple segmented decorative insert has a plurality of said rear projecting pins, one of said pins located adjacent opposite edges of said multiple segmented decorative insert, such that at least one segment of said multiple segmented decorative insert does not have a rear projecting pin<sub>i</sub>.

said segmented base member has a plurality of insert support members fixed to said base member interior for receiving corresponding ones of said plurality of rear projecting pins; and

said fixing operation comprises fixing each pin to its corresponding insert support member.

- 124. A jewelry item comprising:
  - a base member;
  - a cap; and
- a cap attachment arrangement for attaching said cap to said base member.  $\ensuremath{\mathsf{E}}$
- 125. A piece of jewelry comprising:
  - a portion having a top;
  - a cap with an opening therein; and
- a cap attachment arrangement for attaching said cap to said portion.  $% \left\{ 1\right\} =\left\{ 1\right$
- .126. A method for constructing a decorative jewelry item, comprising:

attaching a cap to a base member.

- 127. A jewelry item comprising:
  - a base member:
  - an insert; and
- a retainer for retaining said insert within said
- 128. A method for constructing a jewelry item, comprising: placing an insert into a base member.
- 129. A jewelry item comprising:
  - a base member: and
  - an insert:

said insert being fixed within said base member.

130. A method for constructing a jewelry item, comprising: placing an insert into a base member, whereby said insert is viewable through a top opening.

### (19) World Intellectual Property Organization International Bureau



# A PROBAD SANJANDAN BARRAN SANJAN (1951 JAN 1961 ) SANJA RAMA NABARA BANJAN BARRA BARRAN BARRAN BARRAN BARRAN B

#### (43) International Publication Date 1 March 2001 (01.03,2001)

### PCT

# (10) International Publication Number

	 	 	 -	 	

WO 01/13754 A1

(21) International Application Number: PCT/US00/18389

CA 90014 (US), CHIA, Huy, K. [US/US]; Suite 1104, 412 W. 6th Street, Los Angeles, CA 90014 (US).

- (22) International Filing Date:
- 30 June 2000 (30.06.2000). (74) Agents: PALMER, John et al.; Ladas & Parry, Suite 2100.
- (25) Filing Language:

English English

(26) Publication Language: 09/383,814

(30) Priority Data:

29/110 327

29/116.859

29/120,104

- 26 August 1999 (26.08.1999) US 3 September 1999 (03.09.1999) HS 11 January 2000 (11.01.2000) US 10 March 2000 (10.03.2000) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application: ÙS 09/383.814 (CIP)
  - Filed on 26 August 1999 (26.08.1999)
- (71) Applicants and
- (72) Inventorse CHIA, Meang, K. [US/US]; Suite 1/104, 412 W. 6th Street, Los Angeles, CA 90014 (US), CHIA, Cheo,

- K. [US/US]; Suite 1104, 412 W. 6th Street, Los Angeles,
- 5670 Wilshire Boulevard, Los Angeles, CA 90036-5679 (81) Designated States (national): AE, AG, AL, AM, AT, AU. AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,
- DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO. NZ. PL. PT. RO. RU. SD. SE. SG. St. SK. SL. TJ. TM. TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional); ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:
  - With international search report.

[Continued on next page]

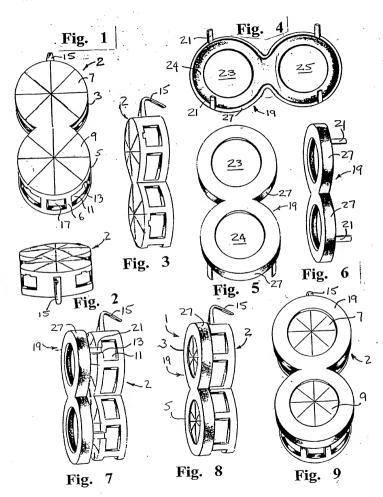
(54) Title: JEWELRY ITEM

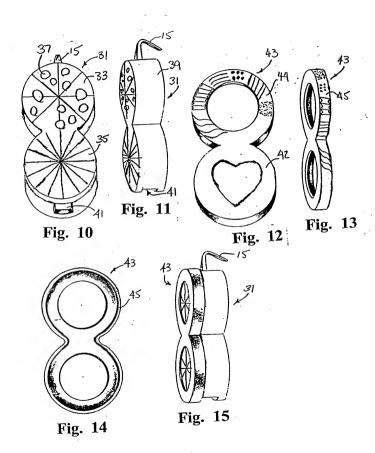


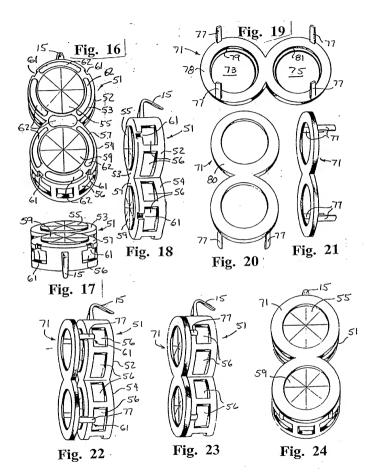


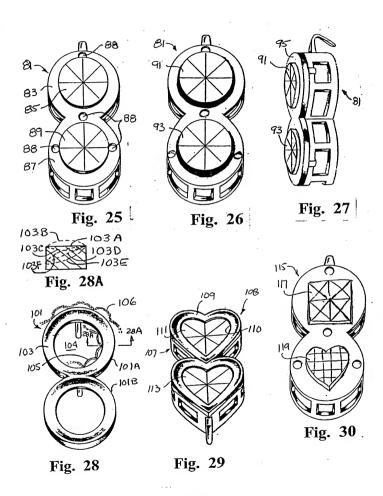


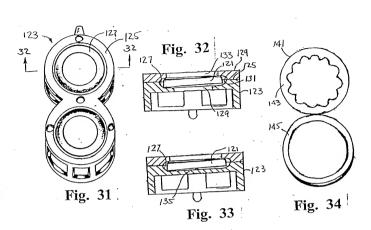
(57) Abstract: A decorative jewelry item comprises a base member (2) with a hollow interior and a decorative top (7), a cap (19) brought down over the decorative top, and a fastener arrangement (21) for fixing the cap to the base member after the cap is brought into contact with the decorative top. The cap has an opening (23, 25) therein through which the decorative top (7, 9) of the base member can be observed. All exposed surfaces of the base member (2) and cap (19) may have surface finishing features and/or graphic representations or designs to make the jewelry item more attractive. In an alternative construction, a decorative insert is inserted, through an opening in the top of a hollow base member, and is fixed within the base member with the insert below the base member top and viewable through the top opening. The jewelry item may be designed to have the appearance of a single decorative unit, or to have the appearance of a double (or greater) decorative unit. Such units have application in many jewelry items. A number of such units may be connected in series to form a tennis bracelet.

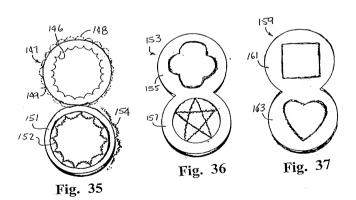


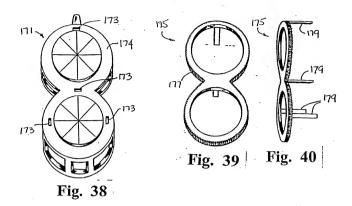


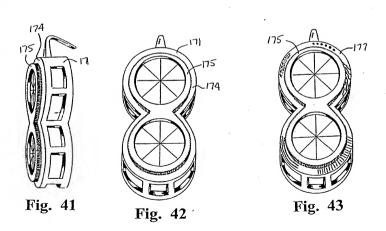


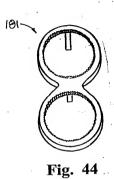




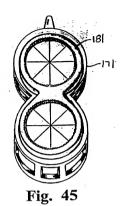


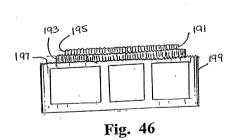


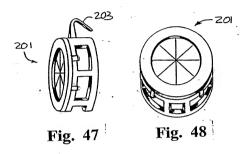


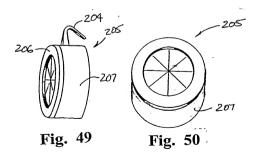


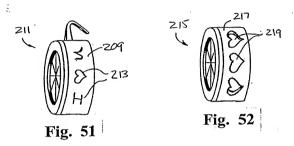
1. 1. (...)











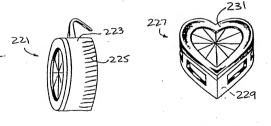


Fig. 53

Fig. 54



Fig. 55

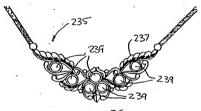
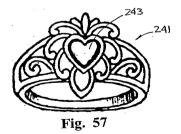
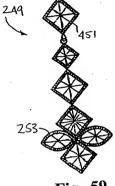


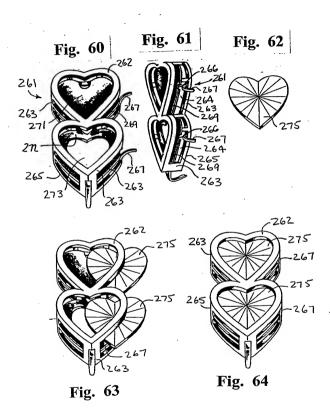
Fig. 56

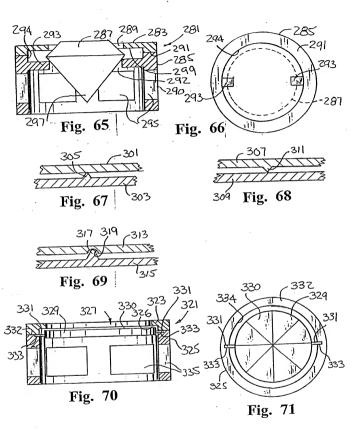


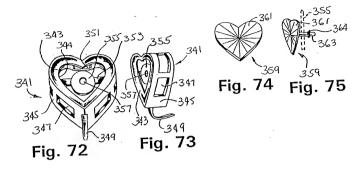
10/16

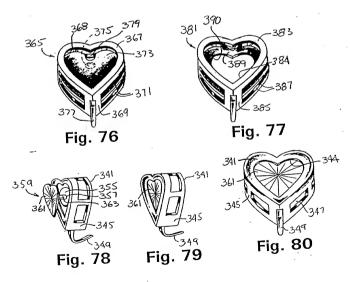


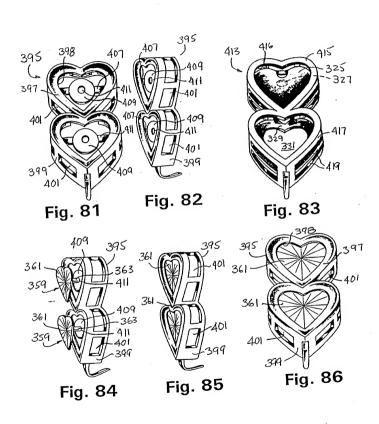












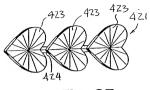


Fig. 87

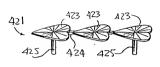


Fig. 88

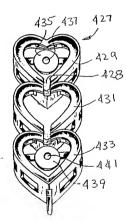


Fig. 89

#### POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

Richard P. Berg, Reg. No. 28,145 Mayls S. Gallenson, Reg. No. 32,464 Kam C. Louie, Reg. No. 33,008 Ross A. Schmitt, Reg. No. 42,529

John Palmer, Reg. No. 36,885 Peter D. Galloway, Reg. No. 27, 885 William R. Evans, Reg. No. 25, 858

(check the following item, if applicable)

[ ] Attached as part of this declaration and power of attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

#### SEND CORRESPONDENCE TO:

DIRECT TELEPHONE CALLS TO: (Name and telephone number)

Kam C. Louie c/o LADAS & PARRY

5670 Wilshire Boulevard, Suite 2100 Los Angeles, California 90036-5679 Kam C. Louie

55-1

(323) 934-2300

#### DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

#### SIGNATURE(S)

# CHECK PROPER BOX(ES) FOR ANY OF THE FOLLOWING ADDED PAGES(S) WHICH FORM A PART OF THIS DECLARATION

[ ] Signature for third and subsequent joint inventors. Number of pages added
[ ] Signature by administrator(trix), executor(trix) or legal representative for deceased o incapacitated inventor. Number of pages added
<ul> <li>Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47.</li> <li>Number of pages added</li> </ul>
•••
[ X ] Added pages to combined declaration and power of attorney.  Number of pages added 1.
•••
[ ] Authorization of attorney(s) to accept and follow instructions from representative.
•••
If no further pages form a part of this Declaration then end this Declaration with this page and check the following item.
I This declaration and with this page

#### ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY

### CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. 120

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that Isdare listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

# PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 USC 120:

4	U.S.	APPLICATIONS	STATUS (Check one)			
Γ	U.S. APPLICATIONS	U.S. FILING DATE	Patented	Pending	Aban- doned	
1.	09/383,814*	26 August 1999		Х		
2.	09/224,936*	31 December 1998		х		
3.	29/120,104*	10 March 2000	Х			
4.	29/116,859*	11 January 2000	Х			
5.	29/110,327*	3 September 1999		х		

PCT APPLICATION				
PCT APPLICATION NO.	PCT FILING DATE	U.S. SERIAL NOS. ASSIGNED (if any)		
6. PCT/US00/18389*	30 June 2000		Х	
7.				
8.				

\*This application is being filed as the U.S. National Stage of co-pending PCT International Patent Application No. PCT/US00/18389 (filed on 30 June 2000), which PCT application designates the United States of America, and which PCT application is a continuation-in-part (CIP) application of: (1) U.S. Application No. 09/383,814 (filed on 26 August 1999); (2) U.S. Application No. 09/224,936 (filed on 31 December 1998); (3) U.S. Application No. 29/120,104 (filed on 10 March 2000); (4) U.S. Application No. 29/116,859 (filed on 11 January 2000); and (5) U.S. Application No. 29/110,327 (filed on 3 September 1999).

### ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code Federal Regulations § 1.56.

[ ] In compliance with this duty there is attached an information disclosure statement 37 CFR 1.97.

#### PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign applications(s) for patent or Inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

- (d) [ ] no such applications have been filed.
- (e) [ ] such applications have been filed as follows.

NOTE: Where item (c) is entered above and the International Application which designated the U.S. claimed priority check item (e), enter the details below and make the priority claim.

# EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN(S)) PRIOR TO THIS U.S. APPLICATION

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
			[]YES []NO
7			[]YES []NO

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN(S)) PRIOR TO THIS U.S. APPLICATION

Attorney	's Docket No. <u>B-4496PCT 619513-8</u>
(ORIGINA	COMBINED DECLARATION AND POWER OF ATTORNEY L, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION, OR CI
As a bel	ow named inventor, I hereby declare that:
	TYPE OF DECLARATION
	daration is of the following type: (check one applicable item below)
	X ] original
Į	] design ] supplemental
NOTE:	If the declaration is for an International Application being filed as a divisional
	tion or continuation-in-part application, do not check next item; check appropriat
	ast three items. X ] national stage of PCT
	If one of the following 3 items apply, then complete and also attach ADDED PAGES FOR
DIVISION	VAL, CONTINUATION, OR CIP.
[	
	continuation continuation-in-part (CIP)
·	1 commands in part (on)
	INVENTORSHIP IDENTIFICATION
WARNIN	G: If the inventors are each not the inventors of all the claims an explanation of the facts, including the ownership of all the claims at the time the last
	claimed invention was made, should be submitted.
believe original,	lence, post office address and citizenship are as stated below next to my name. I am the original, first and sole inventor (if only one name is listed below) or a first and joint inventor (if plural names are listed below) of the subject matte claimed and for which a patent is sought on the invention entitled:
-	TITLE OF INVENTION
	"JEWELRY ITEM"
	SPECIFICATION IDENTIFICATION
	cification of which: <i>(complete (a), (b) or (c))</i> a) [ ] is attached hereto.
	b) [ ] was filed on as [ ] Serial No. /
(	or [ ] Express Mail No., as Serial No. not yet known,
	and was amended on(if applicable).
NOTE: A	Amendments filed after the original papers are deposited with the PTO which contai
	new matter are not accorded a filing date by being referred to in the declaration
<i>A</i>	Accordingly, the amendments involved are those filed with the application papers or In the case of a supplemental declaration, are those amendments claiming matter no
	n the case of a supplemental declaration, are those amendments claiming matter no encompassed in the original statement of invention or claims. See 37 CFR 1.67.
	A CACL It will be a first to the DOT to be and found for the
(	c) [X] was described and claimed in PCT International Application No.  PCT/US00/18389 filed on 30 June 2000 as amended under PCT
	Article 19 (1) on (if any).